



**RCI Labscan**  
**GROUP**

Product Catalog **2021**



**RCI Labscan**  
RCI Labscan Limited

**EOS**  
scientific

**RSAC**  
RCI SYSTEMS & ADVANCED CHEMICALS



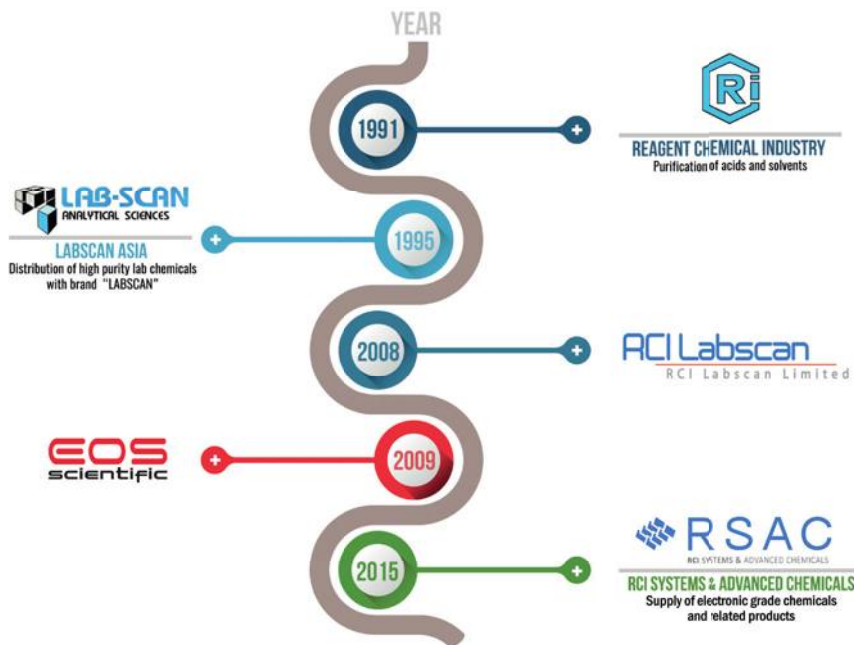
**COMPANY PROFILE – RCI Labscan Group**

**We're an industry leader**

Established in 1991, RCI Labscan Group is a conglomerate of companies, including RCI Labscan Limited, EOS Scientific, and RCI Systems & Advanced Chemicals. We manufacture and distribute high-quality laboratory equipment and chemicals for businesses in a variety of industries. In doing so, our company has grown to become one of the Asia Pacific leading chemical suppliers.

**A timeline of our history**

Over two decades of innovation and product development



**Our vision**

To become Asia Pacific's leading supplier for quality chemicals and laboratory equipment

**Industries we serve**

-  Electronics
-  Chemical
-  Pharmaceutical
-  Education
-  Textile
-  Food & Beverage
-  Petrochemical
-  Lab Research
-  Rubber
-  Feed Mill

## COMPANY PROFILE - RCI Labscan Limited

### Company History

#### RCI LABSCAN Limited

was established in 2008, from the acquisition and merger of Labscan Asia Co., Ltd and Reagent Chemical Industry Co., Ltd. The intensive investment also included the acquisition of Technology and Capability from USA, Europe (UK and Germany), and Asia. The company is already the preferred OEM supplier to a number of global multinational companies. With latest validity equipment, our Quality Control Laboratory is recognized as the Final Quality Testing Lab by some of its Multi-Nation Customer (MNC).

Our products are made available to customers under the brand RCI Labscan for chemical products with various laboratories as well as industrial applications.

With world-class technology and expertise, a strong commitment to excellence in quality, service and value to customers, RCI Labscan has grown rapidly to become one of the leading manufacturers and distributors of purified reagents in Asia

---

#### Labscan Asia Co., LTD. (Established in 1995)

- Joint venture with VS General Chem Group and Labscan Ireland Ltd.
- Production of HIGH PURITY Laboratory Reagents.
- Strong in OEM business and Research/Laboratories in Asia.

#### Reagent Chemical Co., LTD. (Established in 1991)

- Plant designed to produce Electronic Grade and Laboratory Grade ACIDS and SOLVENTS.
- Strong in OEM and Electronics Industry.





## COMPANY CORE VALUES

### Internal Values:

Proactive, Professional, Continuous Process Improvement Culture with Positive Attitude, Respect and Courtesy for all.

### External Values:

We are committed to Excellent Quality, Service and Value for our customers.

## OUR SAFETY AND HEALTH STEWARDSHIP

- Our goal is to achieve a Zero-Harm Workplace. We care about our employees, our community and our environment.
- Our safety and health programs take into consideration the health factors which impact our employees, contractors, their families and our community.
- It is everyone's responsibility at RCI Labscan (including contractors and visitors) to understand and fully comply with our safety standards.

## ISO CERTIFICATES



ISO 9001



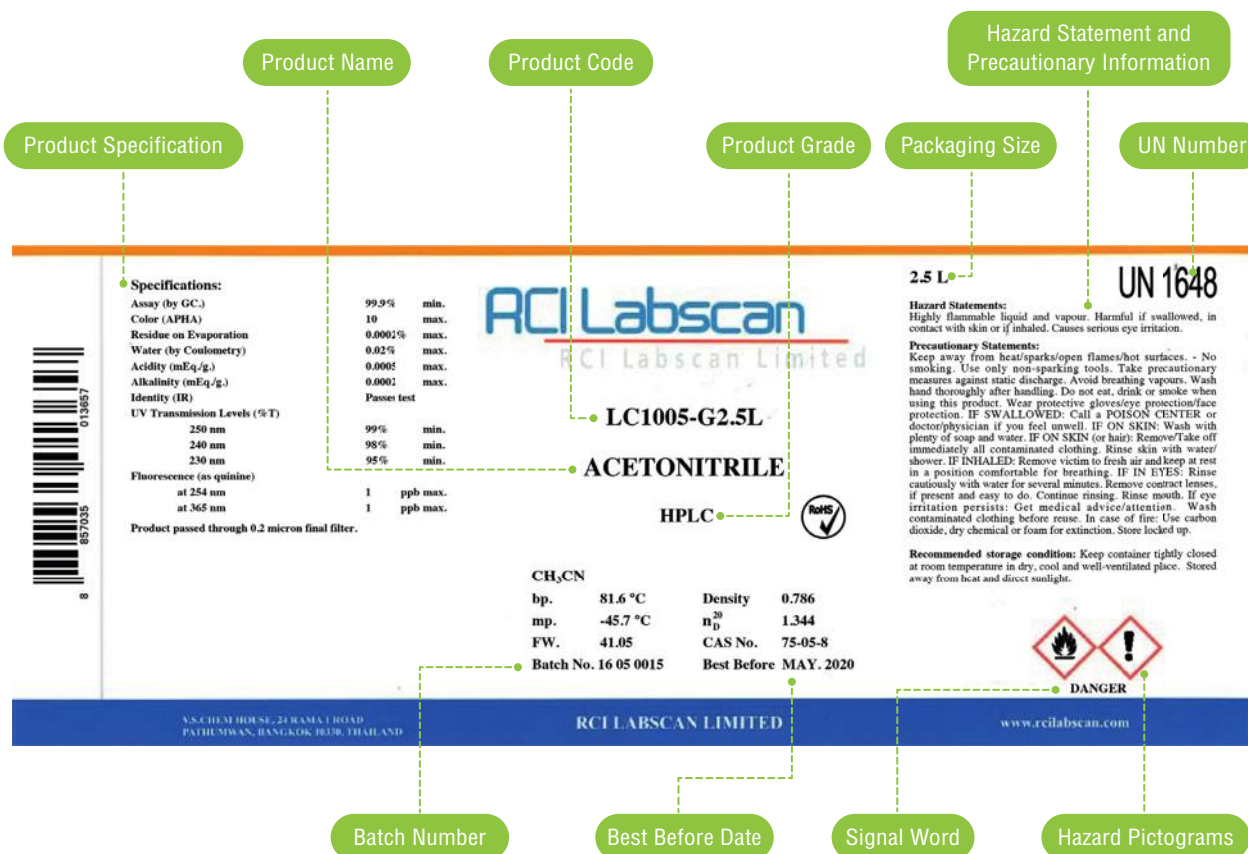
ISO 14001



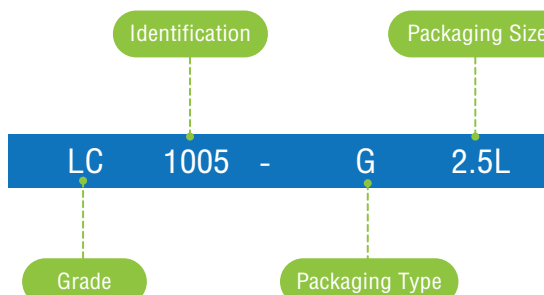
OHSAS 18001

## RCI LABSCAN LABEL

Our Label is designed to provide the necessary up to date information and is in compliance with the GHS system (Globally Harmonized System of Classification and Labelling of Chemicals)



PRODUCT CODE GUIDE  
EXAMPLE: LC1005-G2.5L



## PACKAGING

### “Packaging for safety, convenience and product quality”

RCI Labscan offers a comprehensive range of packaging which is designed for safety, environmental protection, convenient handling and storage. All packaging are guaranteed to preserve the integrity of our products.



#### Amber Glass Bottles:

Suitable for photosensitive Chemicals.

We offer 100ml., 500ml., 1 Litre, 2.5 Litre and 4 Litre size  
 500 ml. and 1 Litre: 6 bottles per box  
 100 ml., 2.5 Litre and 4 Litre: 4 bottles per box



#### Plastic Bottles:

Plastic Bottles are supplied when chemical properties of the content and bottle are compatible, because they minimize the risk of breakage, are lighter in weight as well as being easier and more economical to transport.

We offer 25 grams, 100 grams, 500 grams, 1 kg.,  
 500 ml., 1 Litre, 2.5 Litre and 4 Litre sizes  
 500 ml. and 1 Litre: 6 bottles per box  
 2.5 Litre and 4 Litre: 4 bottles per box  
 25 grams and 100 grams: 4 bottles per box  
 500 grams and 1 kg.: 6 bottles per box



#### Drums for Bulk Quantities:

We currently offer the following sizes:  
 20 Litre HDPE drum  
 200 Litre HDPE drum  
 25 Litre Metal drum  
 200 Litre metal drum

## PRODUCT DETAILS

RCI Labscan products can be used either as general analytical reagents or as ingredients for specialized industrial formulation.

RCI Labscan products are used in a wide range of industries: pharmaceuticals, healthcare, agribusiness, electronics, petroleum and gas, and in research by private organizations and public bodies such as universities. Applications include HPLC, GC, UV spectroscopy and LC-MS.

### Grade Description

#### 1. Pharma Grade (BP)

- Products that meet the requirement of British Pharmacopeia (BP), European Pharmacopoeia (EP), United States Pharmacopoeias (USP) and the National Formulary (NF)
- Products meet the requirements for their pharmaceutical processing

#### 2. Analytical Grade (AR)

- For general analytical applications
- Purity meets the requirement of ACS Standard

#### 3. RCI Premium Grade (RP)

- High purity solvents and reagents with low level of impurities, conform to ISO, Pharma, ACS standard
- Suitable for laboratory and special analytical techniques

#### 4. High Performance Liquid Chromatography Grade (LC)

- For analytical and preparative separation
- Mobile phase in PHLC or LC technique including gel permeation chromatography
- Mobile phase for different type of detector
- Use in the wavelength between 230-190 nm (Far UV region)
- For isocratic technique: low UV absorption

#### 5. Gradient Grade: Supergradient Grade (SG) , Ultragradient (UG)

- Mobile phase for gradient analysis technique
- Low baseline drift and low UV absorption

#### 6. Liquid Chromatography-Mass Spectrometry Grade (LM)

- High purity solvent with low levels of trace metals
- Suitable for LCMS analytical technique

#### 7. Anhydrous Grade (AH)

- Low moisture solvent for anhydrous applications

#### 8. UV-IR Grade (IR)

- High purity solvent for UV-IR Spectroscopy
- High purity solvent with low UV absorption

#### 9. Pesticide Grade (PC)

- For pesticide and insecticide residue analysis
- Suitable for extraction, isolation and preconcentration technique
- For environment analysis by capillary GC and GC-MS application
- For Volatile Organic Analysis (soil, water and solid waste samples)

#### 10. Purge & Trap Grade (PT)

- Suitable for Volatile Organic Residue Analysis by GC-MS

#### 11. Headspace GC Grade (HS)

- High purity solvents designed to ensure optimization for Headspace GC applications
- Specifications are strictly following the USP, Ph.Eur. and ICH guidelines
- Elimination of all major interference peaks in the elution range of target analytes

### 12. LV-GC

- Suitable for ultimate organic trace analysis; checked for ppb levels of Poly-Aromatic Hydrocarbons (PAH's), Furan, PCB's, Pesticides.
- For analysis of hydrocarbons in the range of C10 to C40.
- For residual organic contaminants.

### 13. Peptide Synthesis

- Suitable for Solid Phase Peptide Synthesis.

RCI Labscan offers a broad range of chemicals for use in the electronic industry.

Applications include etching, cleaning and drying.

## Electronic grade: Semig, Electropure, Extropure, Electro extra, VLSI

### 11. Semig Grade (SM)

- High quality acids and solvents for electronic industrial applications.
- Low levels of metallic impurities.
- Suitable for trace metal analysis.

### 12. Electropure Grade (EP)

- High purity acids and solvents for electronic industrial applications.
- Low levels of metallic impurities.
- Suitable for trace metal analysis.

### 13. Extropure Grade (XP)

- High purity solvents, free of Silicone, DOP and Amide

### 14. Electro Extra Grade (EX)

- High purity acids for electronic industrial applications.

### 15. VLSI Grade (VL)

- Very high purity acids and solvents for electronic industrial applications.
- Very low levels of metallic impurities.
- Suitable for trace metal analysis

Custom Purification

RCI Labscan is your reliable partner for custom made products.



## PRODUCT INDEX

Code	Product Name	Page
AR0999	Acetic Acid 50%, AR	19
AR1338	Acetic Acid 60%, AR	19
AR1000	Acetic Acid 96%, AR	20
EP1000	Acetic Acid 96%, Electropure	21
BP1002	Acetic Acid Glacial, Pharma	22
AR1002	Acetic Acid Glacial, AR	22
RP1002	Acetic Acid Glacial, RCI Premium	23
LC1002	Acetic Acid Glacial, HPLC	23
SM1002	Acetic Acid Glacial, Semig	24
EP1002	Acetic Acid Glacial, Electropure	24
VL1002	Acetic Acid Glacial, VLSI	25
BP1003	Acetone, Pharma	26
AR1003	Acetone, AR	27
RP1003	Acetone, RCI Premium	27
IR1003	Acetone, UV-IR	28
LC1003	Acetone, HPLC	28
LC1004	Acetone, HPLC Plus	29
PC1003	Acetone, Pesticide	29
SM1003	Acetone, Semig	30
EP1003	Acetone, Electropure	30
XP1003	Acetone, Extropure	31
VL1003	Acetone, VLSI	32
LV1003	Acetone, LV-GC	32
PS1003	Acetone, Peptide Synthesis	33
AR1005	Acetonitrile, AR	33
RP1005	Acetonitrile, RCI Premium	34
IR1005	Acetonitrile, UV-IR/HPLC	34
AH1010	Acetonitrile, Anhydrous (100 ppm)	35
AH1009	Acetonitrile, Anhydrous (30 ppm)	35
AH1008	Acetonitrile, Anhydrous (10 ppm)	35
LC1005	Acetonitrile, HPLC	36
LC1007	Acetonitrile, Far UV for HPLC	36
LC1219	Acetonitrile, HPLC Plus	37
SG1005	Acetonitrile, Super Gradient for HPLC	37
SG1006	Acetonitrile, Ultra Gradient for HPLC	38
LC1386	Acetonitrile, For LC Analysis.	38
LM1005	Acetonitrile, LC-MS	39
PC1005	Acetonitrile, Pesticide	39
LV1005	Acetonitrile, LV-GC	40
PS1005	Acetonitrile, Peptide Synthesis	40
AR1231	Ammonium Acetate, AR	40
AR1011	Ammonium Chloride, AR	41
AR1012	Ammonium Ferrous (II) Sulfate Hexahydrate, AR	41
BP1304	Ammonium Hydroxide 25% Solution, Pharma.	42
AR1304	Ammonium Hydroxide 25% Solution, AR	42



Code	Product Name	Page
RP1304	Ammonium Hydroxide 25% Solution, RCI Premium	43
EP1304	Ammonium Hydroxide 25% Solution, Electropure	43
AR1404	Ammonium Hydroxide 28% Solution, AR.	44
RP1404	Ammonium Hydroxide 28% Solution, RCI Premium	44
EP1404	Ammonium Hydroxide 28% Solution, Electropure	45
AR1013	Ammonium Molybdate Tetrahydrate, AR	45
AR1014	Ammonium Persulfate, AR	46
AR1015	Ammonium Sulfate, AR	46
RP1015	Ammonium Sulfate, RCI Premium	46
BP1299	Ascorbic acid, Pharma	47
AR1299	Ascorbic acid, AR	47
AR1233	Borax, AR (di-Sodium tetraborate decahydrate)	48
BP1234	Boric Acid, Pharma.	48
AR1234	Boric Acid, AR	49
AR1251	Bromocresol Green Indicator	49
GN1016	Buffer Solution pH 4.0	50
GN1017	Buffer Solution pH 4.0 (Red)	50
GN1018	Buffer Solution pH 4.01	50
GN1019	Buffer Solution pH 6.86	51
GN1020	Buffer Solution pH 7.0	51
GN1021	Buffer Solution pH 7.0 (YELLOW)	51
GN1302	Buffer Solution pH 7.0 (GREEN)	52
GN1036	Buffer Solution pH 9.0	52
GN1022	Buffer Solution pH 10.0	53
GN1023	Buffer Solution pH 10.0 (BLUE)	53
GN1285	Buffer Solution pH 10.01	54
GN1286	Buffer Solution pH 12.45	54
AR1024	Butan-1-ol, AR	55
RP1024	Butan-1-ol, RCI Premium	55
IR1024	Butan-1-ol, UV-IR	56
LC1024	Butan-1-ol, HPLC	56
AR1025	n-Butyl Acetate, AR	57
RP1025	n-Butyl Acetate, RCI Premium	57
LC1025	n-Butyl Acetate, HPLC	58
EP1025	n-Butyl Acetate, Electropure	58
VL1025	n-Butyl Acetate, VLSI	59
AR1235	Calcium Chloride Dihydrate, AR	60
AR1318	Calcium Hydroxide, AR	60
AR1026	Chlorobenzene, AR	61
RP1026	Chlorobenzene, RCI Premium	61
AR1031	1-Chlorobutane, AR	62
RP1031	1-Chlorobutane, RCI Premium	62
LC1031	1-Chlorobutane, HPLC	63
BP1027E	Chloroform, Pharma	63
AR1027E	Chloroform, AR	64
RP1027E	Chloroform, RCI Premium	64
IR1027E	Chloroform, UV-IR	65

Code	Product Name	Page
AH1029E	Chloroform, Anhydrous (50 ppm)	65
AH1028E	Chloroform, Anhydrous (10 ppm)	66
LC1027E	Chloroform, HPLC	66
PC1027E	Chloroform, Pesticide	66
EP1027E	Chloroform, Electropure	67
LV1005	Chloroform, LV-GC	67
PS1027E	Chloroform, Peptide Synthesis	68
AR1236	Citric Acid Monohydrate, AR	68
GN1032	Cleaning Solution S	68
AR1033	Cyclohexane, AR	69
RP1033	Cyclohexane, RCI Premium	69
IR1033	Cyclohexane, UV-IR	70
LC1033	Cyclohexane, HPLC	70
PC1033	Cyclohexane, Pesticide	71
XP1033	Cyclohexane, Extropure	71
LV1033	Cyclohexane, LV-GC	72
AR1034	Cyclohexanone, AR	72
RP1034	Cyclohexanone, RCI Premium	72
AR1037	Cyclopentane 95%, AR	73
AR1035	Cyclopentane 99%, AR	73
RP1035	Cyclopentane 99%, RCI Premium	74
IR1035	Cyclopentane 99%, UV-IR	74
AR1038	1,2-Dichloroethane, AR	75
RP1038	1,2-Dichloroethane, RCI Premium	75
IR1038	1,2-Dichloroethane, UV-IR	76
LC1038	1,2-Dichloroethane, HPLC	76
BP1040A	Dichloromethane, Pharma	77
AR1040A	Dichloromethane, AR	77
RP1040A	Dichloromethane, RCI Premium	78
IR1040A	Dichloromethane, UV-IR	78
AH1043A	Dichloromethane, Anhydrous (50 ppm)	79
AH1042A	Dichloromethane, Anhydrous (10 ppm)	79
LC1040A	Dichloromethane, HPLC	79
LC1041A	Dichloromethane, HPLC Plus	80
PC1040A	Dichloromethane, Pesticide	80
EP1040A	Dichloromethane, Electropure	81
XP1040A	Dichloromethane, Extropure	81
XP1323A	Dichloromethane, SDF	82
LV1040A	Dichloromethane, LV-GC	82
PS1040A	Dichloromethane, Peptide Synthesis	82
AR1044B	Diethyl ether, AR	83
AR1046E	Diethyl ether, AR	83
AR1047E	Diethyl ether, AR	83
RP1044B	Diethyl ether, RCI Premium	84
RP1046E	Diethyl ether, RCI Premium	84
RP1047E	Diethyl ether, RCI Premium	85
IR1044B	Diethyl ether, UV-IR	85

Code	Product Name	Page
AH1045B	Diethyl ether, Anhydrous (50 ppm)	85
LC1046E	Diethyl ether, HPLC	86
LC1044B	Diethyl ether, HPLC	86
PC1046E	Diethyl ether, Pesticide	87
EP1047E	Diethyl Ether, Electropure	87
LV1046E	Diethyl Ether, LV-GC	87
PS1044B	Diethyl Ether, Peptide Synthesis	88
AR1050	Dimethylacetamide, AR	88
RP1050	Dimethylacetamide, RCI Premium	88
GC1050	Dimethylacetamide, For GC Analysis	89
LC1050	Dimethylacetamide, HPLC	89
PS1050	Dimethylacetamide, Peptide Synthesis	89
HS1050	N,N-Dimethylacetamide, For Headspace GC Analysis.	90
BP1051	Dimethylformamide, Pharma.	90
AR1051	Dimethylformamide, AR	91
RP1051	Dimethylformamide, RCI Premium	91
IR1051	Dimethylformamide, UV-IR	91
AH1052	Dimethylformamide, Anhydrous (100 ppm)	92
AH1053	Dimethylformamide (with Molecular seive), Anhydrous (100 ppm)	92
GC1051	Dimethylformamide, For GC Analysis	92
LC1051	Dimethylformamide, HPLC	93
PS1051	Dimethylformamide, Peptide Synthesis	93
HS1051	N,N-Dimethylformamide, For Headspace GC Analysis.	93
AR1054	Dimethylsulphoxide, AR	94
RP1054	Dimethylsulphoxide, RCI Premium	94
IR1334	Dimethylsulphoxide, UV-IR	95
AH1055	Dimethylsulphoxide, Anhydrous (200 ppm)	95
GC1334	Dimethylsulphoxide, For GC Analysis	96
LC1334	Dimethylsulphoxide, HPLC	96
HS1334	Dimethylsulphoxide, For Headspace GC Analysis.	97
AR1057	1, 4-Dioxan, AR	97
RP1057	1, 4-Dioxan, RCI Premium	98
IR1057	1, 4-Dioxan, UV-IR	98
AH1058	1, 4-Dioxan, Anhydrous (50 ppm)	98
LC1057	1, 4-Dioxan, HPLC	99
AR1059B	1, 4-Dioxan, AR	99
RP1059B	1, 4-Dioxan, RCI Premium	100
AH1060B	1, 4-Dioxan, Anhydrous (50 ppm)	100
AR1252	Eriochrome Black T Indicator	101
AR1296	Ethanol 50%	101
AR1382	Ethanol 50%, AR.	102
AR1409	Ethanol 95%, AR.	102
AR1383	Ethanol 96%, AR.	103
AR1361	Ethanol 96%, AR.	103
BP1069	Ethanol, Pharma	104
BP1380	Ethanol, Pharma.	104
AR1069	Ethanol, AR	105

Code	Product Name	Page
AR1380	Ethanol, AR.	105
RP1069	Ethanol, RCI Premium	106
RP1380	Ethanol, RCI Premium	107
LC1380	Ethanol, HPLC	108
AR1070	Ethyl Acetate, AR	109
RP1070	Ethyl Acetate, RCI Premium	109
IR1070	Ethyl Acetate, UV-IR	110
AH1071	Ethyl Acetate, Anhydrous (100 ppm)	110
AH1315	Ethyl Acetate, Anhydrous (50 ppm)	110
LC1070	Ethyl Acetate, HPLC	111
PC1070	Ethyl Acetate, Pesticide	111
LV1070	Ethyl Acetate, LV-GC	111
PS1070	Ethyl Acetate, Peptide Synthesis	112
AR1294	Ethylene Glycol, AR.	112
AR1240	Ethylenediamine Tetraacetic Acid, Disodium Salt Dihydrate, AR	112
RP1240	Ethylenediamine Tetraacetic Acid, Disodium Salt Dihydrate, RCI Premium	113
AR1072M	Formaldehyde 35-40%, AR	113
AR1073M	Formaldehyde 37%, AR	113
AR1074M	Formaldehyde 40%, AR	114
AR1077	Glycine, AR	114
AR1078	n-Heptane 95%, AR	115
RP1078	n-Heptane 95%, RCI Premium	115
LC1078	n-Heptane 95%, HPLC	116
PC1078	n-Heptane 95%, Pesticide	116
LV1078	n-Heptane 95%, LV-GC	116
AR1079	n-Heptane 97%, AR	117
RP1079	n-Heptane 97%, RCI Premium	117
AR1080	n-Heptane 99%, AR	117
RP1080	n-Heptane 99%, RCI Premium	118
IR1080	n-Heptane 99%, UV-IR	118
AH1081	n-Heptane 99%, Anhydrous (50 ppm)	118
LC1080	n-Heptane 99%, HPLC	119
PC1080	n-Heptane 99%, Pesticide	119
LV1080	n-Heptane 99%, LV-GC	119
LC1082	Heptane Fraction, HPLC	120
AR1083	n-Hexane 95%, AR	120
RP1083	n-Hexane 95%, RCI Premium	121
LC1083	n-Hexane 95%, HPLC	121
LC1084	n-Hexane 95%, HPLC Plus	122
PC1083	n-Hexane 95%, Pesticide	122
LV1083	n-Hexane 95%, LV-GC	123
AR1085	n-Hexane 99%, AR	123
RP1085	n-Hexane 99%, RCI Premium	123
IR1085	n-Hexane 99%, UV-IR	124
AH1087	n-Hexane 99%, Anhydrous (50 ppm)	124
LC1085	n-Hexane 99%, HPLC	125
LC1086	n-Hexane 99%, HPLC Plus	125

Code	Product Name	Page
PC1085	n-Hexane 99%, Pesticide	126
LV1085	n-Hexane 99%, LV-GC	126
AR1088	Hexane Fraction, AR	126
RP1088	Hexane Fraction, RCI Premium	127
LC1088	Hexane Fraction, HPLC	127
AR1090	Hexanes, AR	127
RP1090	Hexanes, RCI Premium	128
LC1090	Hexanes, HPLC	128
LC1226	Hexanes, HPLC Plus	129
XP1101	Hexanes, SDF Low Chloride	129
XP1100	Hexanes, SDF	129
GN1108	Hydrochloric acid, 0.1N	130
GN1109	Hydrochloric acid, 0.2N	130
GN1110	Hydrochloric acid, 0.5N	130
GN1111	Hydrochloric acid, 1.0N	131
GN1112	Hydrochloric acid, 4.0N	131
AR1301	Hydrochloric Acid 3%, AR	132
AR1269	Hydrochloric Acid 4%, AR	132
AR1102	Hydrochloric Acid 5%, AR	133
SM1415	Hydrochloric Acid 6%, Semig	133
AR1103	Hydrochloric Acid 7.5%, AR	134
AR1320	Hydrochloric Acid 9%, AR	134
AR1260	Hydrochloric Acid 10%, AR	135
AR1127	Hydrochloric Acid 18%, AR	135
AR1229	Hydrochloric Acid 20%, AR	136
AR1270	Hydrochloric Acid 25%, AR	136
AR1076	Hydrochloric Acid 30%, AR	137
AR1104	Hydrochloric Acid 32%, AR	137
RP1104	Hydrochloric Acid 32%, RCI Premium	138
AR1105	Hydrochloric Acid 35%, AR	138
AR1106	Hydrochloric Acid 36%, AR	139
RP1106	Hydrochloric Acid 36%, RCI Premium	139
BP1107	Hydrochloric Acid 37%, Pharma	140
AR1107	Hydrochloric Acid 37%, AR	140
RP1107	Hydrochloric Acid 37%, RCI Premium	141
SM1107	Hydrochloric Acid 37%, Semig	141
EP1107	Hydrochloric Acid 37%, Electropure	142
VL1107	Hydrochloric Acid 37%, VLSI	143
AR1337	Hydrofluoric Acid 49%, AR	144
EP1337	Hydrofluoric Acid 49%, Electropure	145
AR1275	Hydrogen Peroxide 50% Solution, AR	145
AR1113	Iodine (Resublimed), AR	146
AR1394	Isohexane, AR.	146
AR1242	Magnesium Chloride Hexahydrate, AR	147
AR1244	Magnesium Oxide, AR	147
AR1308	Magnesium Sulfate Anhydrous, AR	148
AR1114	Magnesium Sulfate Heptahydrate, AR	148

Code	Product Name	Page
BP1115	Methanol, Pharma.	149
AR1115	Methanol, AR	150
RP1115	Methanol, RCI Premium	150
IR1115	Methanol, UV-IR	151
AH1116	Methanol, Anhydrous (100 ppm)	151
AH1118	Methanol, Anhydrous (50 ppm)	151
AH1117	Methanol, Anhydrous (20 ppm)	152
LC1115	Methanol, HPLC	152
LC1224	Methanol, HPLC Plus	153
SG1115	Methanol, Super Gradient for HPLC	153
LM1115	Methanol, LC-MS	154
PC1115	Methanol, Pesticide	154
PT1115	Methanol, Purge and Trap	155
SM1115	Methanol, Semig	155
EP1115	Methanol, Electropure	156
XP1115	Methanol, Extropure	156
VL1115	Methanol, VLSI	157
LV1115	Methanol, LV-GC	157
PS1115	Methanol, Peptide Synthesis	157
AR1357	Methanol 75%, AR.	158
AR1122	Methyl ethyl ketone, AR	158
RP1122	Methyl ethyl ketone, RCI Premium	159
LC1122	Methyl ethyl ketone, HPLC	159
EP1122	Methyl ethyl ketone, Electropure	160
XP1122	Methyl ethyl ketone, Extropure	161
AR1217	Methyl Isobutyl ketone, AR	161
AR1253	Methyl Orange Indicator	162
AR1254	Methyl Red Indicator	162
AR1123	n-Methyl-2-Pyrrolidone, AR	163
RP1123	n-Methyl-2-Pyrrolidone, RCI Premium	163
AH1124	n-Methyl-2-Pyrrolidone, Anhydrous (100 ppm)	164
GC1123	n-Methyl-2-Pyrrolidone, For GC Analysis	164
LC1123	n-Methyl-2-Pyrrolidone, HPLC	165
XP1278	n-Methyl-2-Pyrrolidone, Extropure Plus	165
HS1123	n-Methyl-2-Pyrrolidone, For Headspace GC Analysis.	166
PS1123	n-Methyl-2-Pyrrolidone, Peptide Synthesis	166
AR1119	2-Methylbutane 95%, AR	166
RP1119	2-Methylbutane 95%, RCI Premium	167
AR1120	2-Methylbutane 99%, AR	167
RP1120	2-Methylbutane 99%, RCI Premium	167
AR1121	Methylcyclohexane, AR	168
RP1121	Methylcyclohexane, RCI Premium	168
AR1125	Methyl-t-butyl ether, AR	169
RP1125	Methyl-t-butyl ether, RCI Premium	169
LC1125	Methyl-t-butyl ether, HPLC	170
LV1125	Methyl-t-Butyl Ether, LV-GC	170
PS1125	Methyl-t-Butyl Ether, Peptide Synthesis	170



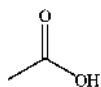
Code	Product Name	Page
AR1129	Nitric Acid 5%, AR	171
AR1130	Nitric Acid 10%, AR	171
AR1406	Nitric Acid 25%, AR.	172
AR1131	Nitric Acid 30%, AR	172
AR1132	Nitric Acid 50%, AR	173
AR1133	Nitric Acid 65%, AR	173
RP1133	Nitric Acid 65%, RCI Premium	174
SM1133	Nitric Acid 65%, Semig	174
EP1134	Nitric Acid 65%, Low Mercury	175
AR1137	Nitric Acid 70%, AR	176
RP1137	Nitric Acid 70%, RCI Premium	176
SM1137	Nitric Acid 70%, Semig	177
SM1136	Nitric Acid 70%, Semig Plus	177
EP1137	Nitric Acid 70%, Electropure	178
VL1137	Nitric Acid 70%, VLSI	179
AR1138	Nitric Acid 90% Fuming, AR	179
AR1139	Nitric Acid 95% Fuming, AR	180
SM1139	Nitric Acid 95% Fuming, Semig	180
AR1135	Nitric Acid 97% Fuming, AR	181
AR1145	n-Pentane 95%, AR	181
RP1145	n-Pentane 95%, RCI Premium	182
LC1145	n-Pentane 95%, HPLC	182
AR1146	n-Pentane 99%, AR	183
RP1146	n-Pentane 99%, RCI Premium	183
IR1146	n-Pentane 99%, UV-IR	184
LC1146	n-Pentane 99%, HPLC	184
PC1146	n-Pentane 99%, Pesticide	185
LV1146	n-Pentane 99%, LV-GC	185
AR1147	Petroleum Ether 40-60, AR	185
RP1147	Petroleum Ether 40-60, RCI Premium	186
LC1147	Petroleum Ether 40-60, HPLC	186
LC1305	Petroleum Ether 40-60, HPLC Plus	187
PC1147	Petroleum Ether 40-60, Pesticide	187
LV1147	Petroleum Ether 40-60, LV-GC	187
AR1148	Petroleum Ether 60-80, AR	188
RP1148	Petroleum Ether 60-80, RCI Premium	188
LC1148	Petroleum Ether 60-80, HPLC	189
PC1148	Petroleum Ether 60-80, Pesticide	189
LV1148	Petroleum Ether 60-80, LV-GC	189
AR1398	Petroleum Ether 60-90, AR.	190
AR1149	Petroleum Ether 80-100, AR.	190
RP1149	Petroleum Ether 80-100, RCI Premium	190
AR1399	Petroleum Ether 90-120, AR.	191
AR1150	Petroleum Ether 100-120, AR.	191
RP1150	Petroleum Ether 100-120, RCI Premium	191
AR1256	Phenolphthalein Indicator	192
BP1152	ortho-Phosphoric acid 85%, Pharma	192

Code	Product Name	Page
AR1152	ortho-Phosphoric acid 85%, AR	193
RP1152	ortho-Phosphoric acid 85%, RCI Premium	193
AR1403	Potassium Chloride, AR.	194
AR1153	Potassium Dihydrogen Orthophosphate Anhydrous, AR	194
RP1153	Potassium Dihydrogen Orthophosphate Anhydrous, RCI Premium	195
GN1158	Potassium hydroxide, 0.1N	195
AR1261	Potassium Hydroxide 11% Solution, AR	196
AR1271	Potassium Hydroxide 30% Solution, AR	196
AR1385	Potassium Hydroxide 85%, AR.	197
AR1159	Potassium Iodate, AR	197
AR1245	Potassium Iodide, AR	198
AR1350	Potassium Iodide 99.5%, AR.	198
AR1160	Potassium Sodium (+) Tartrate Tetrahydrate, AR	199
AR1291	Potassium Sulfate, AR	199
AR1161	Propan-1-ol, AR	200
RP1161	Propan-1-ol, RCI Premium	200
LC1161	Propan-1-ol, HPLC	201
BP1157	Propan-2-ol 80%, Pharma	201
BP1162	Propan-2-ol, Pharma	202
AR1162	Propan-2-ol, AR	202
RP1162	Propan-2-ol, RCI Premium	203
IR1162	Propan-2-ol, UV-IR	204
LC1162	Propan-2-ol, HPLC	204
LC1163	Propan-2-ol, HPLC Plus	205
LM1162	Propan-2-ol, LC-MS	205
PC1162	Propan-2-ol, Pesticide	206
SM1162	Propan-2-ol, Semig	206
SM1163	Propan-2-ol, Semig Plus	207
EP1162	Propan-2-ol, Electropure	207
XP1162	Propan-2-ol, Extropure	208
XP1277	Propan-2-ol, Extropure Plus	209
VL1162	Propan-2-ol, VLSI	210
LV1162	Propan-2-ol, LV-GC	210
PS1162	Propan-2-ol, Peptide Synthesis	211
AR1246	Silver Nitrate, AR	211
AR1165	Sodium Acetate Trihydrate, AR	211
AR1166	Sodium Chloride 99%, AR	212
AR1167	Sodium Chloride 99.5%, AR	212
AR1227	Sodium Chloride 99.9%, AR	212
AR1168	Sodium Hydrogen Carbonate, AR	213
AR1237	di-Sodium Hydrogen Phosphate Anhydrous, AR	213
RP1237	di-Sodium Hydrogen Phosphate Anhydrous, RCI Premium	214
AR1238	di-Sodium Hydrogen Phosphate Dihydrate, AR	214
AR1325	Sodium Hydroxide (Micropearls), AR	215
GN1173	Sodium hydroxide, 0.1N	215
GN1321	Sodium hydroxide, 0.5N	216
GN1174	Sodium hydroxide, 1.0N	216

Code	Product Name	Page
AR1265	Sodium Hydroxide 25% Solution, AR	217
AR1332	Sodium Hydroxide 30% Solution, AR	217
AR1169	Sodium Hydroxide 35% Solution, AR	218
AR1374	Sodium Hydroxide 40% Solution, AR	218
AR1170	Sodium Hydroxide 48% Solution, AR	219
AR1175	Sodium Nitrite, AR	219
AR1249	Sodium Nitrate, AR	220
AR1176	Sodium Sulfate Anhydrous, AR	220
GN1178	Sodium thiosulfate, 0.1N	221
AR1177	Sodium Thiosulfate Pentahydrate, AR	221
AR1179	Stannous (II) Chloride Dihydrate, AR	222
AR1180	Sucrose, AR	222
GN1194	Sulfuric acid, 0.1N	223
GN1195	Sulfuric acid, 0.2N	223
GN1196	Sulfuric acid, 0.4N	223
GN1197	Sulfuric acid, 1.0N	224
AR1362	Sulfuric Acid 5%, AR	224
AR1184	Sulfuric Acid 50%, AR	224
SM1184	Sulfuric Acid 50%, Semig	225
AR1185	Sulfuric Acid 60%, AR	225
SM1185	Sulfuric Acid 60%, Semig	226
EP1185	Sulfuric Acid 60%, Electropure	226
AR1330	Sulfuric Acid 62.5%, AR.	227
VL1151	Sulfuric Acid 81%, VLSI	227
SM1189	Sulfuric Acid 89%, Semig	228
EX1189	Sulfuric Acid 89%, Electro Extra	229
AR1191	Sulfuric Acid 96%, AR	229
AR1191	Sulfuric Acid 96%, AR	230
AR1341	Sulfuric Acid 96%, AR	230
RP1191	Sulfuric Acid 96%, RCI Premium	231
SM1191	Sulfuric Acid 96%, Semig	231
EP1192	Sulfuric Acid 96%, Low Mercury	232
EP1191	Sulfuric Acid 96%, Electropure	232
VL1191	Sulfuric Acid 96%, VLSI	233
BP1193	Sulfuric Acid 98%, Pharma	233
AR1193	Sulfuric Acid 98%, AR	234
RP1193	Sulfuric Acid 98%, RCI Premium	234
SM1193	Sulfuric Acid 98%, Semig	235
EP1193	Sulfuric Acid 98%, Electropure	235
AR1199	Tetrachloroethylene, AR Low Hydrocarbon	236
AR1198	Tetrachloroethylene, AR	236
RP1199	Tetrachloroethylene, RCI Premium Low Hydrocarbon	236
RP1198	Tetrachloroethylene, RCI Premium	237
IR1198	Tetrachloroethylene, UV-IR	237
AR1203B	Tetrahydrofuran, AR	238
RP1203B	Tetrahydrofuran, RCI Premium	238
IR1200	Tetrahydrofuran, UV-IR	239

Code	Product Name	Page
AH1202	Tetrahydrofuran, Anhydrous (50 ppm)	239
AH1204B	Tetrahydrofuran, Anhydrous (50 ppm)	239
AH1201B	Tetrahydrofuran, Anhydrous (20 ppm)	239
LC1200	Tetrahydrofuran, HPLC	240
LC1203B	Tetrahydrofuran, HPLC	240
PS1203B	Tetrahydrofuran, Peptide Synthesis	240
AR1207	Toluene, AR	241
RP1347	Toluene, RCI Premium	241
IR1347	Toluene, UV-IR	242
AH1348	Toluene, Anhydrous (50 ppm)	242
LC1347	Toluene, HPLC	242
PC1347	Toluene, Pesticide	243
SM1207	Toluene, Semig	243
LV1347	Toluene, LV-GC	244
PS1347	Toluene, Peptide Synthesis	244
AR1317	Trichloroacetic acid, AR	244
AR1205	Trichloroethylene, AR	245
RP1205	Trichloroethylene, RCI Premium	245
LC1205	Trichloroethylene, HPLC	246
AR1206	2,2,4-Trimethylpentane, AR	246
RP1206	2,2,4-Trimethylpentane, RCI Premium	247
IR1206	2,2,4-Trimethylpentane, UV-IR	247
LC1206	2,2,4-Trimethylpentane, HPLC	248
PC1206	2,2,4-Trimethylpentane, Pesticide	248
LV1206	2,2,4-Trimethylpentane, LV-GC	248
AR1209	tri-Sodium Citrate Dihydrate, AR	249
AR1250	Urea, AR	249
GN1056	Water (Deionized Water)	250
AR1210	Water, AR	250
LC1210	Water, HPLC	250
LM1210	Water, LC-MS	251
PC1210	Water, Pesticide	251
LV1210	Water, LV-GC	251
GN1211	Wijs Solution	252
GN1212	Wijs Solution 0.1N	252
AR1213	Xylene, AR	253
RP1354	Xylene, RCI Premium	253
SM1213	Xylene, Semig	254
AR1214	Zinc Sulfate Heptahydrate, AR	254

## ACETIC ACID 50%



CH <sub>3</sub> COOH	FW. 60.05	Density 1 L =	1.07 Kg.
CAS-No.	64-19-7	Melting Point	17 °C
UN No.	2790	Boiling Point	105 °C
EC No.	200-580-7	EC-Index-No	607-002-00-6
Class:	8	Packaging Group:	II
GHS:	H314; P260, H264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P405		



## Acetic Acid 50%, AR

Code AR0999

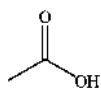
## Specifications

Assay (by acidimetry)	50%	min	Chloride (Cl)	0.5	ppm max.
Color (APHA)	10	max.	Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Titration base (mEq./g.)	0.0004	max.	Heavy metals (as Pb)	0.01	ppm max.
Residue on Evaporation	0.001%	max.	Arsenic (As)	0.001	ppm max.
Substances reducing dichromate	Passes test		Iron (Fe)	0.2	ppm max.
Substances reducing permanganate	Passes test				

Cat No.	Package	Size
AR0999-G500ML	Amber Glass	500 ML
AR0999-G1L	Amber Glass	1 Litre
AR0999-G2.5L	Amber Glass	2.5 Litre
AR0999-P2.5L	Plastic	2.5 Litre
AR0999-G4L	Amber Glass	4 Litre
AR0999-P4L	Plastic	4 Litre

Cat No.	Package	Size
AR0999-P20L	Plastic	20 Litre
AR0999-P120L	Plastic	120 Litre
AR0999-P200L	Plastic	200 Litre
AR0999-P16KG	Plastic	16 KG
AR0999-P20KG	Plastic	20 KG
AR0999-P210KG	Plastic	210 KG

## ACETIC ACID 60%



CH <sub>3</sub> COOH	FW. 60.05	Density 1 L =	1.07 Kg.
CAS-No.	64-19-7	Boiling Point	117-118 °C
UN No.	2790	EC-Index-No	607-002-00-6
EC No.	200-580-7	Packaging Group:	II
Class:	8		
GHS:	H314; P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P405		



## Acetic Acid 60%, AR

Code AR1338

## Specifications

Assay (by acidimetry)	59.0-61.0%	Chloride (Cl)	0.5	ppm max.	
Color (APHA)	10	max.	Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Titration base (mEq./g.)	0.0004	max.	Heavy metals (as Pb)	0.01	ppm max.
Residue on Evaporation	0.0001%	max.	Arsenic (As)	0.001	ppm max.
Substances reducing dichromate	Passes test		Iron (Fe)	0.2	ppm max.
Substances reducing permanganate	Passes test		Formic acid	0.1%	max.

Cat No.	Package	Size
AR1338-P4L	Plastic	4 Litre

Cat No.	Package	Size
AR1338-P20L	Plastic	20 Litre

## ACETIC ACID 96%



CH <sub>3</sub> COOH	FW. 60.05	Density 1 L =	1.06 Kg.
CAS-No.	64-19-7	Melting Point	16.6 °C
UN No.	2789	Boiling Point	118 °C
EC No.	200-580-7	EC-Index-No	607-002-00-6
Class:	8(3)	Packaging Group:	II
GHS:	H226, H314; P210, P233, P240, P241, P242, P243, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P370 + P378, P403 + P235, P405		



### Acetic Acid 96%, AR

Code AR1000

#### Specifications

Assay (by acidimetry)	96.0%	min.
Dilution test	Passes test	
Color (APHA)	10	max.
Titration base (mEq./g.)	0.0004	max.
Acetic Anhydride [(CH <sub>3</sub> CO) <sub>2</sub> O]	0.01%	max.
Residue on Evaporation	0.001%	max.
Substances reducing dichromate	Passes test	

Substances reducing permanganate	Passes test	
Chloride (Cl)	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Heavy metals (as Pb)	0.5	ppm max.
Arsenic (As)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.

Cat No.	Package	Size
AR1000-G500ML	Amber Glass	500 ML
AR1000-G1L	Amber Glass	1 Litre
AR1000-G2.5L	Amber Glass	2.5 Litre
AR1000-P2.5L	Plastic	2.5 Litre
AR1000-G4L	Amber Glass	4 Litre
AR1000-P4L	Plastic	4 Litre

Cat No.	Package	Size
AR1000-P20L	Plastic	20 Litre
AR1000-P120L	Plastic	120 Litre
AR1000-P200L	Plastic	200 Litre
AR1000-P16KG	Plastic	16 KG
AR1000-P20KG	Plastic	20 KG
AR1000-P210KG	Plastic	210 KG





## Specifications

Assay (by acidimetry)	96.0%	min.	Germanium (Ge)	0.02	ppm max.
Color (APHA)	10	max.	Gold (Au)	0.1	ppm max.
Acetic Anhydride [(CH <sub>3</sub> CO) <sub>2</sub> O]	0.01%	max.	Indium (In)	0.02	ppm max.
Solubility in water	Passes test		Iron (Fe)	0.2	ppm max.
Substances reducing dichromate	Passes test		Lead (Pb)	0.02	ppm max.
Substances reducing permanganate	Passes test		Lithium (Li)	0.02	ppm max.
Residue on Evaporation	5	ppm max.	Magnesium (Mg)	0.2	ppm max.
Chloride (Cl)	0.5	ppm max.	Manganese (Mn)	0.02	ppm max.
Phosphate (PO <sub>4</sub> )	1	ppm max.	Molybdenum (Mo)	0.02	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.	Nickel (Ni)	0.02	ppm max.
Aluminium (Al)	0.05	ppm max.	Platinum (Pt)	0.02	ppm max.
Arsenic and Antimony (as As)	0.005	ppm max.	Potassium (K)	0.1	ppm max.
Barium (Ba)	0.05	ppm max.	Silver (Ag)	0.02	ppm max.
Beryllium (Be)	0.02	ppm max.	Sodium (Na)	0.5	ppm max.
Bismuth (Bi)	0.05	ppm max.	Strontium (Sr)	0.05	ppm max.
Boron (B)	0.05	ppm max.	Thallium (Tl)	0.02	ppm max.
Cadmium (Cd)	0.02	ppm max.	Tin (Sn)	0.1	ppm max.
Calcium (Ca)	0.5	ppm max.	Titanium (Ti)	0.05	ppm max.
Chromium (Cr)	0.02	ppm max.	Vanadium (V)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.	Zinc (Zn)	0.1	ppm max.
Copper (Cu)	0.02	ppm max.	Zirconium (Zr)	0.05	ppm max.
Gallium (Ga)	0.02	ppm max.			

Cat No.	Package	Size
EP1000-G500ML	Amber Glass	500 ML
EP1000-G1L	Amber Glass	1 Litre
EP1000-G2.5L	Amber Glass	2.5 Litre
EP1000-P2.5L	Plastic	2.5 Litre
EP1000-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
EP1000-P4L	Plastic	4 Litre
EP1000-P20L	Plastic	20 Litre
EP1000-P120L	Plastic	120 Litre
EP1000-P200L	Plastic	200 Litre



## ACETIC ACID GLACIAL



CH <sub>3</sub> COOH	FW. 60.05	Density 1 L =	1.05 Kg.
CAS-No.	64-19-7	Melting Point	17 °C
UN No.	2789	Boiling Point	118 °C
EC No.	200-580-7	EC-Index-No	607-002-00-6
Class:	8(3)	Packaging Group:	II
GHS:	H226, H314; P210, P233, P240, P241, P242, P243, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P370 + P378, P403 + P235, P405		



### Acetic Acid Glacial, Pharma

Code BP1002

#### Specifications

( Meet ACS, Ph.Eur,BP,USP )

Assay (by acidimetry)	99.7 - 100%
identification	Passes test
Dilution test	Passes test
Solubility	Passes test
Appearance	Clear and Colorless
Color (APHA)	10 max.
Titration base (mEq./g.)	0.0004 max.
Acetic Anhydride [(CH <sub>3</sub> CO) <sub>2</sub> O]	0.01% max.
Residue on Evaporation	0.001% max.

Substances reducing dichromate	Passes test	
Substances reducing permanganate	Passes test	
Chloride (Cl)	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Heavy metals (as Pb)	0.5	ppm max.
Arsenic (As)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.
Freezing point (°C)	16	min.

Cat No.	Package	Size
BP1002-G500ML	Amber Glass	500 ML
BP1002-G1L	Amber Glass	1 Litre
BP1002-G2.5L	Amber Glass	2.5 Litre
BP1002-P2.5	Plastic	2.5 Litre
BP1002-G4L	Amber Glass	4 Litre
BP1002-P4L	Plastic	4 Litre

Cat No.	Package	Size
BP1002-P20L	Plastic	20 Litre
BP1002-P120L	Plastic	120 Litre
BP1002-P200L	Plastic	200 Litre
BP1002-P16KG	Plastic	16 KG
BP1002-P20KG	Plastic	20 KG
BP1002-P200KG	Plastic	200 KG

### Acetic Acid Glacial, AR

Code AR1002

#### Specifications

(Meet A.C.S. Specifications)

Assay (by acidimetry)	99.8%	min.
Dilution test	Passes test	
Color (APHA)	10	max.
Titration base (mEq./g.)	0.0004	max.
Acetic Anhydride [(CH <sub>3</sub> CO) <sub>2</sub> O]	0.01%	max.
Residue on Evaporation	0.001%	max.
Substances reducing dichromate	Passes test	

Substances reducing permanganate	Passes test	
Chloride (Cl)	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Heavy metals (as Pb)	0.5	ppm max.
Arsenic (As)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.

Cat No.	Package	Size
AR1002-G500ML	Amber Glass	500 ML
AR1002-G1L	Amber Glass	1 Litre
AR1002-G2.5L	Amber Glass	2.5 Litre
AR1002-P2.5L	Plastic	2.5 Litre
AR1002-G4L	Amber Glass	4 Litre
AR1002-P4L	Plastic	4 Litre

Cat No.	Package	Size
AR1002-P20L	Plastic	20 Litre
AR1002-P120L	Plastic	120 Litre
AR1002-P200L	Plastic	200 Litre
AR1002-P16KG	Plastic	16 KG
AR1002-P20KG	Plastic	20 KG
AR1002-P210KG	Plastic	210 KG

## Acetic Acid Glacial, RCI Premium

Code RP1002

## Specifications

(Meet A.C.S. Specifications)

Assay (by acidimetry)	99.7%	min.
Color (APHA)	10	max.
Titration base (mEq./g.)	0.0004	max.
Residue after Evaporation	0.0005%	max.
Dilution in water	Passes test	
Solubility in water	Passes test	
Substances Reducing Dichromate	Passes test	
Substances Reducing Permanganate	Passes test	
Acetic Anhydride [(CH <sub>3</sub> CO) <sub>2</sub> O]	0.01%	max.
Acetaldehyde	0.005%	max.
Chloride (Cl)	0.00005%	max.
Sulfate (SO <sub>4</sub> )	0.00005%	max.
Heavy Metals (as Pb)	0.00005%	max.
Aluminium (Al)	0.00001%	max.
Arsenic and Antimony (as As)	0.000001%	max.
Barium (Ba)	0.00005%	max.
Boron (B)	0.00001%	max.
Cadmium (Cd)	0.000002%	max.

Calcium (Ca)	0.00003%	max.
Cobalt (Co)	0.000001%	max.
Chromium (Cr)	0.00002%	max.
Copper (Cu)	0.000002%	max.
Gold (Au)	0.00003%	max.
Iron (Fe)	0.00002%	max.
Lead (Pb)	0.000002%	max.
Magnesium (Mg)	0.00001%	max.
Manganese (Mn)	0.000001%	max.
Molybdenum (Mo)	0.000002%	max.
Nickel (Ni)	0.000002%	max.
Potassium (K)	0.00003%	max.
Sodium (Na)	0.00003%	max.
Strontium (Sr)	0.000001%	max.
Tin (Sn)	0.00001%	max.
Titanium (Ti)	0.00003%	max.
Zinc (Zn)	0.00001%	max.

Cat No.	Package	Size
RP1002-G500ML	Amber Glass	500 ML
RP1002-G1L	Amber Glass	1 Litre
RP1002-G2.5L	Amber Glass	2.5 Litre
RP1002-P2.5L	Plastic	2.5 Litre
RP1002-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
RP1002-P4L	Plastic	4 Litre
RP1002-P20L	Plastic	20 Litre
RP1002-P120L	Plastic	120 Litre
RP1002-P200L	Plastic	200 Litre

## Acetic Acid Glacial, HPLC

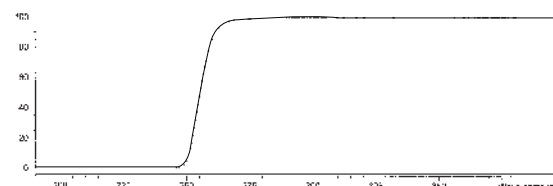
Code LC1002

## Specifications

Assay (by acidimetry)	99.8%	min.
Water (by Coulometry)	0.2%	max.
Color (APHA)	10	max.
Residue on Evaporation	0.0005%	max.
Chloride (Cl)	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
UV Transmission Levels (%T)		
300 nm	98%	min.
280 nm	97%	min.
260 nm	80%	min.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
LC1002-G500ML	Amber Glass	500 ML
LC1002-G1L	Amber Glass	1 Litre



Cat No.	Package	Size
LC1002-G2.5L	Amber Glass	2.5 Litre
LC1002-G4L	Amber Glass	4 Litre

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

## Acetic Acid Glacial, Semig

Code SM1002

### Specifications

Assay (by acidimetry)	99.7%	min.
Color (APHA)	10	max.
Residue on Evaporation	5	ppm max.
Solubility in Water	Passes test	
Substances reducing dichromate	Passes test	
Substances reducing permanganate	Passes test	
Chloride (Cl)	0.5	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Aluminium (Al)	0.3	ppm max.
Arsenic and Antimony (as As)	0.005	ppm max.
Boron (B)	0.2	ppm max.
Calcium (Ca)	0.3	ppm max.

Chromium (Cr)	0.2	ppm max.
Copper (Cu)	0.1	ppm max.
Gold (Au)	0.3	ppm max.
Iron (Fe)	0.2	ppm max.
Lead (Pb)	0.3	ppm max.
Magnesium (Mg)	0.3	ppm max.
Manganese (Mn)	0.3	ppm max.
Nickel (Ni)	0.1	ppm max.
Potassium (K)	0.3	ppm max.
Sodium (Na)	0.3	ppm max.
Tin (Sn)	0.3	ppm max.
Titanium (Ti)	0.3	ppm max.
Zinc (Zn)	0.3	ppm max.

Cat No.	Package	Size
SM1002-G500ML	Amber Glass	500 ML
SM1002-G1L	Amber Glass	1 Litre
SM1002-G2.5L	Amber Glass	2.5 Litre
SM1002-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1002-G4L	Amber Glass	4 Litre
SM1002-P4L	Plastic	4 Litre
SM1002-P20L	Plastic	20 Litre
SM1002-P200L	Plastic	200 Litre

## Acetic Acid Glacial, Electropure

Code EP1002

### Specifications

Assay (by acidimetry)	99.8%	min.
Color (APHA)	10	max.
Acetaldehyde	2	ppm max.
Acetic Anhydride [(CH <sub>3</sub> CO) <sub>2</sub> O]	100	ppm max.
Residue on Evaporation	5	ppm max.
Solubility in water	Passes test	
Substances reducing dichromate	Passes test	
Substances reducing permanganate	Passes test	
Chloride (Cl)	0.5	ppm max.
Phosphate (PO <sub>4</sub> )	1	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Aluminium (Al)	0.05	ppm max.
Arsenic and Antimony (as As)	0.005	ppm max.
Barium (Ba)	0.05	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.05	ppm max.
Boron (B)	0.05	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.

Gallium (Ga)	0.02	ppm max.
Germanium (Ge)	0.02	ppm max.
Gold (Au)	0.1	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.2	ppm max.
Lead (Pb)	0.02	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Platinum (Pt)	0.1	ppm max.
Potassium (K)	0.1	ppm max.
Silver (Ag)	0.02	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.05	ppm max.
Thallium (Tl)	0.05	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.05	ppm max.
Vanadium (V)	0.02	ppm max.
Zinc (Zn)	0.1	ppm max.
Zirconium (Zr)	0.05	ppm max.

Cat No.	Package	Size
EP1002-G500ML	Amber Glass	500 ML
EP1002-G1L	Amber Glass	1 Litre
EP1002-G2.5L	Amber Glass	2.5 Litre
EP1002-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
EP1002-G4L	Amber Glass	4 Litre
EP1002-P4L	Plastic	4 Litre
EP1002-P200L	Plastic	200 Litre

## Specifications

Assay (by acidimetry)	99.8%	min.	Germanium (Ge)	20	ppb max.
Color (APHA)	10	max.	Gold (Au)	20	ppb max.
Acetaldehyde	2	ppm max.	Indium (In)	10	ppb max.
Acetic Anhydride [(CH <sub>3</sub> CO) <sub>2</sub> O]	100	pm max.	Iron (Fe)	100	ppb max.
Formic acid	100	ppm max.	Lead (Pb)	10	ppb max.
Residue on Evaporation	5	ppm max.	Lithium (Li)	10	ppb max.
Substances reducing dichromate	Passes test		Magnesium (Mg)	50	ppb max.
Substances reducing permanganate	Passes test		Manganese (Mn)	10	ppb max.
Solubility in water	Passes test		Molybdenum (Mo)	20	ppb max.
Chloride (Cl)	0.1	ppm max.	Nickel (Ni)	10	ppb max.
Phosphate (PO <sub>4</sub> )	0.05	ppm max.	Platinum (Pt)	20	ppb max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.	Potassium (K)	50	ppb max.
Aluminium (Al)	20	ppb max.	Silver (Ag)	10	ppb max.
Arsenic and Antimony (as As)	5	ppb max.	Sodium (Na)	200	ppb max.
Barium (Ba)	10	ppb max.	Strontium (Sr)	20	ppb max.
Beryllium (Be)	10	ppb max.	Thallium (Tl)	20	ppb max.
Bismuth (Bi)	50	ppb max.	Tin (Sn)	50	ppb max.
Boron (B)	10	ppb max.	Titanium (Ti)	50	ppb max.
Cadmium (Cd)	10	ppb max.	Vanadium (V)	10	ppb max.
Calcium (Ca)	100	ppb max.	Zinc (Zn)	50	ppb max.
Chromium (Cr)	10	ppb max.	Zirconium (Zr)	20	ppb max.
Cobalt (Co)	10	ppb max.			
Copper (Cu)	10	ppb max.			
Gallium (Ga)	10	ppb max.			

Product passed through 1 micron final filter.

Cat No.	Package	Size
VL1002-G500ML	Amber Glass	500 ML
VL1002-G1L	Amber Glass	1 Litre
VL1002-G2.5L	Amber Glass	2.5 Litre
VL1002-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
VL1002-G4L	Amber Glass	4 Litre
VL1002-P4L	Plastic	4 Litre
VL1002-P20L	Plastic	20 Litre
VL1002-P200L	Plastic	200 Litre



## ACETONE



CH <sub>3</sub> COCH <sub>3</sub>	FW. 58.08	Density 1 L =	0.790 Kg.
CAS-No.	67-64-1	Melting Point	-95.4 °C
UN No.	1090	Boiling Point	56.2 °C
EC No.	200-662-2	EC-Index-No	606-001-00-8
Class:	3	Packaging Group:	II



GHS: H225, H319, H336, EUH066; P210, P233, P240, P241, P242, P243, P261, P264, P271, P280, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P312, P337 + P313, P370 + P378, P403 + P235, P405

### Acetone, Pharma

Code BP1003

#### Specifications

(Conforms to ACS, Ph.Eur, BP, USP)

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Appearance	Clear, Colorless liquid	
Color (APHA)	10	max.
Water (by Coulometry)	0.3%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Acidity or alkalinity	Passes test	
Residue on Evaporation	0.0005%	max.
Benzene (GC.)	2	ppm max.
Cyclohexane (GC.)	0.01%	max.
Diacetone (GC.)	0.02%	max.
Ethanol (GC.)	0.01%	max.
Methanol (GC.)	0.05%	max.
Propan-2-ol (GC.)	0.05%	max.
Other impurity (GC.)	0.05%	max.
Related substances (GC.)	Passes test	
Aldehydes (as formaldehyde)	0.001%	max.
Reducing substances	Passes test	
Solubility in water	Passes test	
Substances reducing permanganate (as O)	Passes test	
Readily oxidizable substances	Passes test	
Water-insoluble substances	Passes test	
Chloride (Cl)	0.1	ppm max.
Nitrate (NO <sub>3</sub> )	0.1	ppm max.
Phosphate (PO <sub>4</sub> )	0.1	ppm max.
Sulfate (SO <sub>4</sub> )	0.1	ppm max.
Heavy metals (as Pb)	1.0	ppm max.
Aluminium (Al)	0.5	ppm max.

Antimony (Sb)	0.02	ppm max.
Arsenic (As)	0.02	ppm max.
Barium (Ba)	0.1	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.02	ppm max.
Boron (B)	0.02	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Gallium (Ga)	0.02	ppm max.
Germanium (Ge)	0.02	ppm max.
Gold (Au)	0.02	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.1	ppm max.
Lithium (Li)	0.05	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Silver (Ag)	0.02	ppm max.
Thallium (Tl)	0.02	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.02	ppm max.
Vanadium (V)	0.02	ppm max.
Zinc (Zn)	0.1	ppm max.
Zirconium (Zr)	0.02	ppm max.

Cat No.	Package	Size
BP1003-P20L	Plastic	20 Litre



## Acetone, AR

Code AR1003

## Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity (mEq./g.)	0.0003	max.
Alkalinity (mEq./g.)	0.0006	max.
Residue on Evaporation	0.001%	max.

Methanol (GC.)	0.05%	max.
Propan-2-ol (GC.)	0.05%	max.
Aldehyde (as HCHO)	0.002%	max.
Solubility in water	Passes test	
Substances reducing permanganate	Passes test	

Cat No.	Package	Size
AR1003-G500ML	Amber Glass	500 ML
AR1003-G1L	Amber Glass	1 Litre
AR1003-G2.5L	Amber Glass	2.5 Litre
AR1003-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1003-G4L	Amber Glass	4 Litre
AR1003-P4L	Plastic	4 Litre
AR1003-P20L	Plastic	20 Litre
AR1003-P200L	Plastic	200 Litre

## Acetone, RCI Premium

Code RP1003

## Specifications

(Meet A.C.S. Specifications and USP/NF)

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Appearance of solution	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Benzene (GC.)	2	ppm max.
Cyclohexane (residual solvent) (GC.)	0.01%	max.
Diacetone (GC.)	0.02%	max.
Ethanol (GC.)	0.01%	max.
Methanol (GC.)	0.05%	max.
Other impurity (GC.)	0.05%	max.
Propan-2-ol (GC.)	0.05%	max.
Related substances (GC.)	Passes test	
Acidity or alkalinity	Passes test	
Aldehydes (as formaldehyde)	0.001%	max.
Reducing substances	Passes test	
Solubility in water	Passes test	
Substances reducing permanganate (as O)	0.00025%	max.
Water-insoluble substances	Passes test	
Chloride (Cl)	0.1	ppm max.
Nitrate (NO <sub>3</sub> )	0.1	ppm max.
Phosphate (PO <sub>4</sub> )	0.1	ppm max.
Sulfate (SO <sub>4</sub> )	0.1	ppm max.
Aluminium (Al)	0.5	ppm max.
Antimony (Sb)	0.02	ppm max.

Arsenic (As)	0.02	ppm max.
Barium (Ba)	0.1	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.02	ppm max.
Boron (B)	0.02	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Gallium (Ga)	0.02	ppm max.
Germanium (Ge)	0.02	ppm max.
Gold (Au)	0.02	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.1	ppm max.
Lithium (Li)	0.05	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Silver (Ag)	0.02	ppm max.
Thallium (Tl)	0.02	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.02	ppm max.
Vanadium (V)	0.02	ppm max.
Zinc (Zn)	0.1	ppm max.
Zirconium (Zr)	0.02	ppm max.

Cat No.	Package	Size
RP1003-G500ML	Amber Glass	500 ML
RP1003-G1L	Amber Glass	1 Litre
RP1003-G2.5L	Amber Glass	2.5 Litre
RP1003-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
RP1003-G4L	Amber Glass	4 Litre
RP1003-P4L	Plastic	4 Litre
RP1003-P20L	Plastic	20 Litre
RP1003-P200L	Plastic	200 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Acetone, UV-IR

Code IR1003

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.

UV Transmission Levels (%T)			
350 nm	99%	min.	
340 nm	85%	min.	
335 nm	60%	min.	

Fluorescence (as quinine)			
at 365 nm	1	ppb max.	

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1003-G500ML	Amber Glass	500 ML
IR1003-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1003-G2.5L	Amber Glass	2.5 Litre
IR1003-G4L	Amber Glass	4 Litre

## Acetone, HPLC

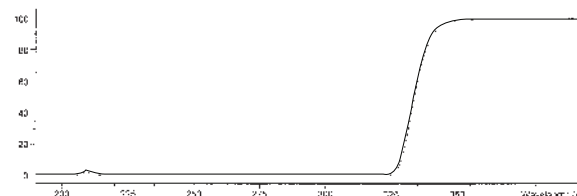
Code LC1003

### Specifications

Assay (by GC.)	99.8%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
Aldehyde (as HCHO)	0.002%	max.
Methanol (GC.)	0.05%	max.
Propan-2-ol (GC.)	0.05%	max.
Solubility in water	Passes test	
Substances reducing permanganate	Passes test	

Fluorescence (as quinine)			
at 365 nm	1	ppb max.	

Product passed through 0.2 micron final filter.



UV Transmission Levels (%T)			
355 nm	99%	min.	
350 nm	98%	min.	
340 nm	85%	min.	
335 nm	50%	min.	

Cat No.	Package	Size
LC1003-G500ML	Amber Glass	500 ML
LC003-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1003-G2.5L	Amber Glass	2.5 Litre
LC1003-G4L	Amber Glass	4 Litre

## Acetone, HPLC Plus

Code LC1004

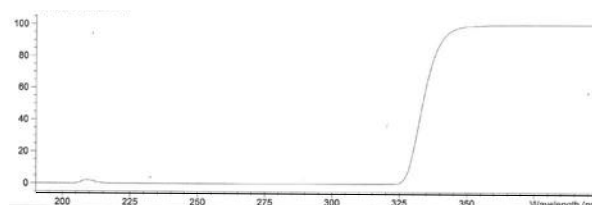
## Specifications

Assay (by GC.)	99.8%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
Aldehyde (as HCHO)	0.002%	max.
Methanol (GC.)	0.05%	max.
Propan-2-ol (GC.)	0.05%	max.
Solubility in water	Passes test	
Substances reducing permanganate	Passes test	
UV Transmission Levels (%T)		
355 nm	99%	min.
350 nm	98%	min.
340 nm	85%	min.
335 nm	50%	min.

Cat No.	Package	Size
LC1004-G500ML	Amber Glass	500 ML
LC1004-G1L	Amber Glass	1 Litre

Fluorescence (as quinine)		
at 365 nm	1	ppb max.
Silicone oil	Free	
DOP	Free	
Amide	Free	

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1004-G2.5L	Amber Glass	2.5 Litre
LC1004-G4L	Amber Glass	4 Litre

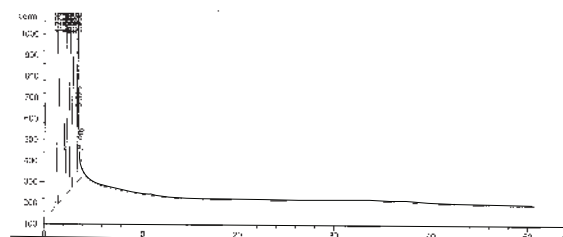
## Acetone, Pesticide

Code PC1003

## Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Substances reducing permanganate	Passes test	
ECD (as lindane standard) Single impurity peak	10	ng/L

Cat No.	Package	Size
PC1003-G500ML	Amber Glass	500 ML
PC1003-G1L	Amber Glass	1 Litre



Cat No.	Package	Size
PC1003-G2.5L	Amber Glass	2.5 Litre
PC1003-G4L	Amber Glass	4 Litre

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

## Acetone, Semig

Code SM1003

### Specifications

Assay (by GC.)	99.9%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity ( $\mu\text{Eq./g.}$ )	0.3	max.
Alkalinity ( $\mu\text{Eq./g.}$ )	0.5	max.
Solubility in water	Passes Test	
Residue on Evaporation	3	ppm max.
Chloride (Cl)	0.2	ppm max.
Phosphate ( $\text{PO}_4$ )	0.1	ppm max.
Aluminium (Al)	0.1	ppm max.
Arsenic and Antimony (as As)	0.01	ppm max.
Boron (B)	0.1	ppm max.
Calcium (Ca)	0.1	ppm max.
Chromium (Cr)	0.1	ppm max.

Copper (Cu)	0.1	ppm max.
Gallium (Ga)	0.1	ppm max.
Gold (Au)	0.1	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.1	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.1	ppm max.
Nickel (Ni)	0.1	ppm max.
Potassium (K)	0.1	ppm max.
Sodium (Na)	0.1	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.1	ppm max.
Zinc (Zn)	0.1	ppm max.

Cat No.	Package	Size
SM1003-G500ML	Amber Glass	500 ML
SM1003-G1L	Amber Glass	1 Litre
SM1003-G2.5L	Amber Glass	2.5 Litre
SM1003-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1003-G4L	Amber Glass	4 Litre
SM1003-P4L	Plastic	4 Litre
SM1003-P20L	Plastic	20 Litre
SM1003-P200L	Plastic	200 Litre

## Acetone, Electropure

Code EP1003

### Specifications

Assay (by GC.)	99.8%	min.
Identity	Corresponds to IR spectrum	
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity ( $\mu\text{Eq./g.}$ )	0.3	max.
Alkalinity ( $\mu\text{Eq./g.}$ )	0.5	max.
Specific resistance ( $\text{M}\Omega\cdot\text{cm}$ )	5	min.
Residue on Evaporation	5	ppm max.
Ethanol (GC.)	100	ppm max.
Methanol (GC.)	500	ppm max.
Aldehydes (as HCHO)	10	ppm max.
Solubility in water	Passes test	
Substances reducing permanganate (as O)	2.5	ppm max.
Chloride (Cl)	0.2	ppm max.
Phosphate ( $\text{PO}_4$ )	0.1	ppm max.
Heavy metals (as Pb)	0.1	ppm max.
Aluminium (Al)	0.05	ppm max.
Antimony (Sb)	0.01	ppm max.
Arsenic (As)	0.01	ppm max.
Barium (Ba)	0.05	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.1	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.1	ppm max.

Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.01	ppm max.
Gallium (Ga)	0.02	ppm max.
Gold (Au)	0.05	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.02	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Molybdenum (Mo)	0.05	ppm max.
Nickel (Ni)	0.01	ppm max.
Platinum (Pt)	0.2	ppm max.
Potassium (K)	0.05	ppm max.
Silver (Ag)	0.02	ppm max.
Sodium (Na)	0.2	ppm max.
Strontium (Sr)	0.02	ppm max.
Thallium (Tl)	0.05	ppm max.
Tin (Sn)	0.05	ppm max.
Titanium (Ti)	0.05	ppm max.
Vanadium (V)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.
Zirconium (Zr)	0.2	ppm max.

Cat No.	Package	Size
EP1003-G500ML	Amber Glass	500 ML
EP1003-G1L	Amber Glass	1 Litre
EP1003-G2.5L	Amber Glass	2.5 Litre
EP1003-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
EP1003-G4L	Amber Glass	4 Litre
EP1003-P4L	Plastic	4 Litre
EP1003-P20L	Plastic	20 Litre
EP1003-P200L	Plastic	200 Litre

## Acetone, Extropure

Code XP1003

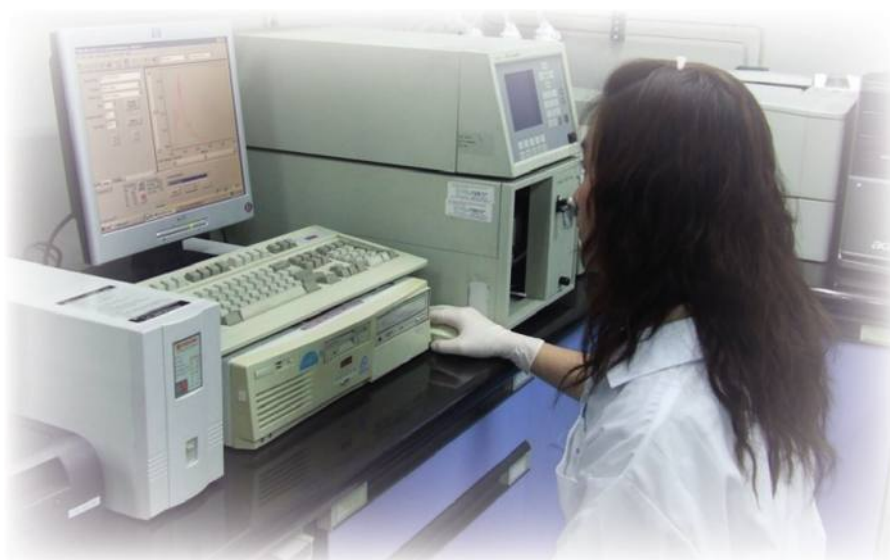
## Specifications

Assay (by GC.)	99.9%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.3%	max.
Acidity ( $\mu\text{Eq./g.}$ )	0.3	max.
Alkalinity ( $\mu\text{Eq./g.}$ )	0.5	max.
Solubility in water	Passes test	
Residue on Evaporation	3	ppm max.
Chloride (Cl)	0.2	ppm max.
Phosphate ( $\text{PO}_4$ )	0.1	ppm max.
Heavy metals (as Pb)	100	ppb max.
Aluminium (Al)	50	ppb max.
Arsenic and Antimony (as As)	10	ppb max.
Barium (Ba)	20	ppb max.
Boron (B)	20	ppb max.
Cadmium (Cd)	20	ppb max.
Calcium (Ca)	50	ppb max.
Chromium (Cr)	20	ppb max.
Cobalt (Co)	20	ppb max.
Copper (Cu)	10	ppb max.
Gallium (Ga)	50	ppb max.
Germanium (Ge)	50	ppb max.

Gold (Au)	20	ppb max.
Iron (Fe)	20	ppb max.
Lead (Pb)	20	ppb max.
Lithium (Li)	50	ppb max.
Magnesium (Mg)	20	ppb max.
Manganese (Mn)	10	ppb max.
Nickel (Ni)	10	ppb max.
Potassium (K)	50	ppb max.
Silicon (Si)	50	ppb max.
Silver (Ag)	20	ppb max.
Sodium (Na)	50	ppb max.
Strontium (Sr)	20	ppb max.
Tin (Sn)	50	ppb max.
Titanium (Ti)	20	ppb max.
Zinc (Zn)	50	ppb max.
Silicone oil	Free	
DOP	Free	
Amide	Free	
Particle/ml:		
0.5 $\mu\text{m}$ and greater	65	max.
1.0 $\mu\text{m}$ and greater	8	max.

Cat No.	Package	Size
XP1003-G500ML	Amber Glass	500 ML
XP1003-G1L	Amber Glass	1 Litre
XP1003-G2.5L	Amber Glass	2.5 Litre
XP1003-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
XP1003-G4L	Amber Glass	4 Litre
XP1003-P4L	Plastic	4 Litre
XP1003-P20L	Plastic	20 Litre
XP1003-P200L	Plastic	200 Litre



A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

## Acetone, VLSI

Code VL1003

### Specifications

Assay (by GC.)	99.8%	min.	Indium (In)	10	ppb max.
Identity	Corresponds to IR spectrum		Iron (Fe)	10	ppb max.
Water (by Coulometry)	0.2%	max.	Lead (Pb)	10	ppb max.
Acidity (mEq./g.)	0.3	max.	Lithium (Li)	10	ppb max.
Alkalinity (mEq./g.)	0.5	max.	Magnesium (Mg)	20	ppb max.
Specific resistance (MΩ.cm)	5	min.	Manganese (Mn)	10	ppb max.
Residue on Evaporation	3	ppm max.	Molybdenum (Mo)	10	ppb max.
Ethanol (GC.)	50	ppm max.	Nickel (Ni)	10	ppb max.
Methanol (GC.)	500	ppm max.	Platinum (Pt)	50	ppb max.
Aldehydes (as HCHO)	10	ppm max.	Potassium (K)	20	ppb max.
Substances reducing permanganate (as O)	2.5	ppm max.	Silver (Ag)	10	ppb max.
Aluminium (Al)	50	ppb max.	Sodium (Na)	100	ppb max.
Arsenic and Antimony (as As)	10	ppb max.	Strontium (Sr)	10	ppb max.
Barium (Ba)	20	ppb max.	Thallium (Tl)	10	ppb max.
Beryllium (Be)	10	ppb max.	Tin (Sn)	20	ppb max.
Bismuth (Bi)	20	ppb max.	Titanium (Ti)	20	ppb max.
Boron (B)	10	ppb max.	Vanadium (V)	10	ppb max.
Cadmium (Cd)	10	ppb max.	Zinc (Zn)	20	ppb max.
Calcium (Ca)	100	ppb max.	Zirconium (Zr)	20	ppb max.
Chromium (Cr)	10	ppb max.	Particle/ml:		
Cobalt (Co)	10	ppb max.	0.5 µm and greater	30	max.
Copper (Cu)	10	ppb max.	1.0 µm and greater	8	max.
Gallium (Ga)	10	ppb max.			
Gold (Au)	20	ppb max.			

Product passed through 1 micron final filter.

Cat No.	Package	Size
VL1003-G500ML	Amber Glass	500 ML
VL1003-G1L	Amber Glass	1 Litre
VL1003-G2.5L	Amber Glass	2.5 Litre
VL1003-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
VL1003-G4L	Amber Glass	4 Litre
VL1003-P4L	Plastic	4 Litre
VL1003-P20L	Plastic	20 Litre
VL1003-P200L	Plastic	200 Litre

## Acetone, LV-GC

Code LV1003

### Specifications

Assay (by GC.)	99.9%	min.	Residue on Evaporation	0.0003%	max.
Identity (IR)	Passes test		Substances reducing permanganate	Passes test	
Color (APHA)	10	max.	ECD (as lindane standard)	10	pp/ml max.
Water (by Coulometry)	0.2%	max.	Single impurity peak		
Acidity (mEq./g.)	0.0005	max.	Any hydrocarbon between C10 to C40	0.1	mg/L max.
Alkalinity (mEq./g.)	0.0002	max.			

Cat No.	Package	Size
LV1003-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1003-G2.5L	Amber Glass	2.5 Litre

## Acetone, Peptide Synthesis

Code PS1003

## Specifications

Assay (by GC.)	99.9%	min.	Alkalinity (mEq./g.)	0.0002	max.
Identity (IR)	Passes test		Residue on Evaporation	0.0003%	max.
Color (APHA)	10	max.	Methanol (GC.)	0.05%	max.
Water (by Coulometry)	0.2%	max.	Propan-2-ol (GC.)	0.05%	max.
Acidity (mEq./g.)	0.0003	max.	Free Amines	0.001%	max.

Cat No.	Package	Size
PS1003-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PS1003-G2.5L	Amber Glass	2.5 Litre

## ACETONITRILE



CH <sub>3</sub> CN	FW. 41.05	Density 1 L =	0.786 Kg.
CAS-No.	75-05-8	Melting Point	-45.7 °C
UN No.	1648	Boiling Point	81.6 °C
EC No.	200-835-2	EC-Index-No	608-001-00-3
Class:	3	Packaging Group:	II
GHS:	H225, H302 + H312 + H332, H319; P210, P240, P241, P242, P243, P261, P264, P270, P271, P280, P301 + P312, P302 + P352, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P330, P337 + P313, P363, P370 + P378, P403 + P233, P405		



## Acetonitrile, AR

Code AR1005

## Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.7%	min.	Acidity (mEq./g.)	0.0005	max.
Appearance	Clear		Alkalinity (mEq./g.)	0.0006	max.
Color (APHA)	10	max.	Residue on Evaporation	0.001%	max.
Water (by Coulometry)	0.05%	max.	Propionitrile	0.2%	max.

Cat No.	Package	Size
AR1005-G500ML	Amber Glass	500 ML
AR1005-G1L	Amber Glass	1 Litre
AR1005-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1005-G4L	Amber Glass	4 Litre
AR1005-M25L	Metal	25 Litre
AR1005-M200L	Metal	200 Litre



A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

**Acetonitrile, RCI Premium**

**Code RP1005**

**Specifications**

**(Meet A.C.S. Specifications)**

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0001	max.
Residue on Evaporation	0.001%	max.
Cyanide (CN)	0.005%	max.
Propionitrile	0.2%	max.
Aluminium (Al)	0.5	ppm max.
Barium (Ba)	0.1	ppm max.
Boron (B)	0.02	ppm max.

Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.1	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Tin (Sn)	0.1	ppm max.
Zinc (Zn)	0.1	ppm max.

Cat No.	Package	Size
RP1005-G500ML	Amber Glass	500 ML
RP1005-G1L	Amber Glass	1 Litre
RP1005-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1005-G4L	Amber Glass	4 Litre
RP1005-M25L	Metal	25 Litre
RP1005-M200L	Metal	200 Litre

**Acetonitrile, UV-IR/HPLC**

**Code IR1005**

**Specifications**

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
UV Transmission Levels (%T)		
250 - 230 nm	99%	min.

220 nm	97%	min.
210 nm	95%	min.
200 nm	90%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1005-G500ML	Amber Glass	500 ML
IR1005-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1005-G2.5L	Amber Glass	2.5 Litre
IR1005-G4L	Amber Glass	4 Litre





## Acetonitrile, Anhydrous (100 ppm)

Code AH1010

## Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.

Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.

Cat No.	Package	Size
AH1010-G500ML	Amber Glass	500 ML
AH1010-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1010-G2.5L	Amber Glass	2.5 Litre
AH1010-G4L	Amber Glass	4 Litre

## Acetonitrile, Anhydrous (30 ppm)

Code AH1009

## Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.003%	max.

Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.

Cat No.	Package	Size
AH1009-G500ML	Amber Glass	500 ML
AH1009-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1009-G2.5L	Amber Glass	2.5 Litre
AH1009-G4L	Amber Glass	4 Litre

## Acetonitrile, Anhydrous (10 ppm)

Code AH1008

(Suitable for DNA Synthesis)

## Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.001%	max.

Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.

Cat No.	Package	Size
AH1008-G100ML	Amber Glass	100 ML
AH1008-G500ML	Amber Glass	500 ML
AH1008-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1008-G2.5L	Amber Glass	2.5 Litre
AH1008-G4L	Amber Glass	4 Litre



A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

**Acetonitrile, HPLC**

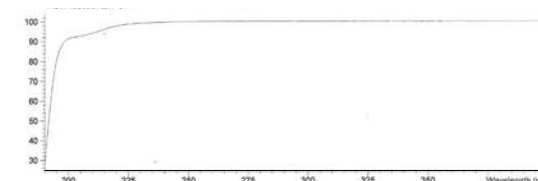
**Code LC1005**

**Specifications**

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
<b>UV Transmission Levels (%T)</b>		
250 nm	99%	min.
240 nm	98%	min.
230 nm	97%	min.
210 nm	93%	min.
195 nm	70%	min.

<b>Fluorescence (as quinine)</b>		
at 254 nm	0.5	ppb max.
at 365 nm	0.5	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1005-G500ML	Amber Glass	500 ML
LC1005-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1005-G2.5L	Amber Glass	2.5 Litre
LC1005-G4L	Amber Glass	4 Litre

**Acetonitrile, Far UV for HPLC**

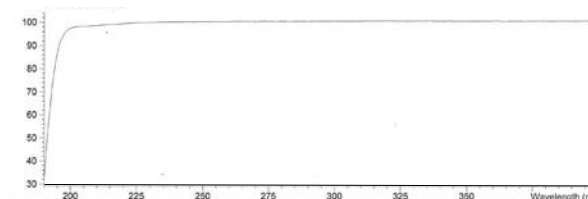
**Code LC1007**

**Specifications**

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
<b>UV Transmission Levels (%T)</b>		
230 nm	99%	min.
220 nm	98%	min.
210 nm	90%	min.
200 nm	80%	min.
190 nm	30%	min.

<b>Fluorescence (as quinine)</b>		
at 254 nm	0.5	ppb max.
at 365 nm	0.5	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1007-G500ML	Amber Glass	500 ML
LC1007-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1007-G2.5L	Amber Glass	2.5 Litre
LC1007-G4L	Amber Glass	4 Litre



## Acetonitrile, HPLC Plus

Code LC1219

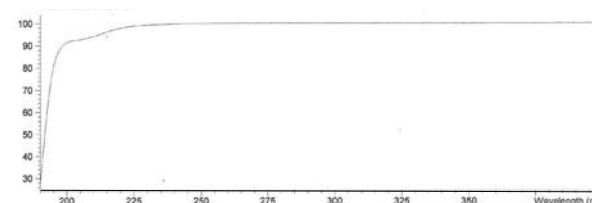
## Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	97%	min.
210 nm	93%	min.
195 nm	70%	min.
Fluorescence (as quinine)		
at 254 nm	0.5	ppb max.
at 365 nm	0.5	ppb max.

Cat No.	Package	Size
LC1219-G500ML	Amber Glass	500 ML
LC1219-G1L	Amber Glass	1 Litre

Silicone oil	Free
DOP	Free
Amide	Free

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1219-G2.5L	Amber Glass	2.5 Litre
LC1219-G4L	Amber Glass	4 Litre

## Acetonitrile, Super Gradient for HPLC

Code SG1005

## Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
UV Transmission Levels (%T)		
230 nm	99%	min.
195 nm	80%	min.

Cat No.	Package	Size
SG1005-G500ML	Amber Glass	500 ML
SG1005-G1L	Amber Glass	1 Litre

190 nm	30%	min.
Gradient Specification		
at 210 nm	1.0	mAU max.
at 254 nm	0.5	mAU max.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	0.5	ppb max.

\*Suitable for HPLC, UPLC / UHPLC / Ultra HPLC-instruments.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
SG1005-G2.5L	Amber Glass	2.5 Litre
SG1005-G4L	Amber Glass	4 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**Acetonitrile, Ultra Gradient for HPLC** Code SG1006

Specifications					
Assay (by GC.)	99.95%	min.	at 254 nm	0.5	mAU max.
Identity (IR)	Passes test		Fluorescence (as quinine)		
Color (APHA)	10	max.	at 254 nm	0.5	ppb max.
Water (by Coulometry)	0.01%	max.	at 365 nm	0.3	ppb max.
Acidity (as CH <sub>3</sub> COOH)	0.001%	max.	Aluminium (Al)	20	ppb max.
Alkalinity (as NH <sub>3</sub> )	0.0001%	max.	Calcium (Ca)	50	ppb max.
Residue on Evaporation	0.0001%	max.	Iron (Fe)	20	ppb max.
UV Transmission Levels (%T)			Magnesium (Mg)	20	ppb max.
230 nm	99%	min.	Potassium (K)	50	ppb max.
215 nm	98%	min.	Sodium (Na)	100	ppb max.
200 nm	97%	min.			
195 nm	85%	min.			
191 nm	30%	min.			
Gradient Specification: Highest Peak					
at 210 nm	2.0	mAU max.			

\*Suitable for HPLC, UPLC / UHPLC / Ultra HPLC - instruments.  
Product passed through 0.1 micron final filter and bottled under inert gas.

Cat No.	Package	Size
SG1006-G500ML	Amber Glass	500 ML
SG1006-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
SG1006-G2.5L	Amber Glass	2.5 Litre
SG1006-G4L	Amber Glass	4 Litre

**Acetonitrile, For LC Analysis** Code LC1386

Specifications			UV Absorbance		
Assay (by GC.)	99.7%	min.	280 nm	0.01	AU max.
Appearance	Clear and colorless liquid		254 nm	0.02	AU max.
Color (APHA)	10	max.	214 nm	0.15	AU max.
Water (by Coulometry)	0.1%	max.	190 nm	1.00	AU max.
Acidity (as CH <sub>3</sub> COOH)	0.005%	max.			
Residue on Evaporation	0.001%	max.			

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
LC1386-M200L	Metal	200 Litre



## Acetonitrile, LC-MS

Code LM1005

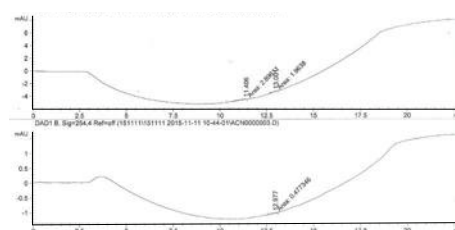
## Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0001%	max.
UV Transmission Levels (%T)		
230 nm	99%	min.
195 nm	85%	min.
190 nm	30%	min.
Gradient Specification		
at 210 nm	1.0	MAU max.
at 254 nm	0.5	MAU max.
Fluorescence (as quinine)		
at 254 nm	1.0	ppb max.
at 365 nm	0.5	ppb max.
Aluminium (Al)	5	ppb max.
Barium (Ba)	5	ppb max.
Cadmium (Cd)	5	ppb max.
Calcium (Ca)	20	ppb max.
Chromium (Cr)	5	ppb max.
Cobalt (Co)	5	ppb max.

Cat No.	Package	Size
LM1005-G500ML	Amber Glass	500 ML
LM1005-G1L	Amber Glass	1 Litre

Copper (Cu)	5	ppb max.
Iron (Fe)	10	ppb max.
Lead (Pb)	5	ppb max.
Magnesium (Mg)	5	ppb max.
Manganese (Mn)	5	ppb max.
Nickel (Ni)	5	ppb max.
Potassium (K)	5	ppb max.
Sodium (Na)	20	ppb max.
Tin (Sn)	5	ppb max.
Zinc (Zn)	5	ppb max.

Product passed through 0.1 micron final filter and bottled under inert gas.



Cat No.	Package	Size
LM1005-G2.5L	Amber Glass	2.5 Litre
LM1005-G4L	Amber Glass	4 Litre

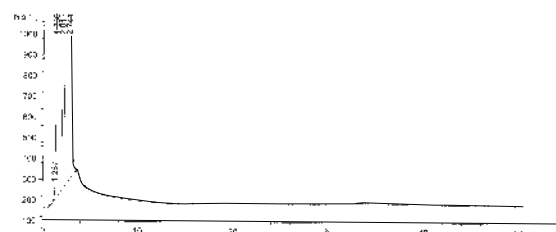
## Acetonitrile, Pesticide

Code PC1005

## Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
ECD (as lindane standard) Single impurity peak	10	ng/L

Cat No.	Package	Size
PC1005-G500ML	Amber Glass	500 ML
PC1005-G1L	Amber Glass	1 Litre



Cat No.	Package	Size
PC1005-G2.5L	Amber Glass	2.5 Litre
PC1005-G4L	Amber Glass	4 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Acetonitrile, LV-GC

Code LV1005

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.

Residue on Evaporation	0.0003%	max.
ECD (as lindane standard)	10	pg/ml max.
Single impurity peak		
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1005-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1005-G2.5L	Amber Glass	2.5 Litre

## Acetonitrile, Peptide Synthesis

Code PS1005

### Specifications

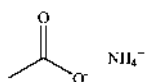
Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.

Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
Free Amines	0.001%	max.

Cat No.	Package	Size
PS1005-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PS1005-G2.5L	Amber Glass	2.5 Litre

## AMMONIUM ACETATE



CH<sub>3</sub>COONH<sub>4</sub>      FW. 77.08  
CAS-No.              631-61-8  
EC No.                211-162-9

Density =              1.17 g/cm<sup>3</sup>  
Melting Point        114 °C

## Ammonium Acetate, AR

Code AR1231

### Specifications

Assay	98.0%	min.
Reaction	pH 6.5 - 7.5	
Insoluble matter	0.001%	max.
Non-volatile matter	0.01%	max.
Chloride (Cl)	0.0005%	max.
Nitrate (NO <sub>3</sub> )	0.002%	max.
Phosphate (PO <sub>4</sub> )	0.0005%	max.

Sulfate (SO <sub>4</sub> )	0.002%	max.
Calcium (Ca)	0.001%	max.
Copper (Cu)	0.0001%	max.
Iron (Fe)	0.0001%	max.
Lead (Pb)	0.0001%	max.
Magnesium (Mg)	0.0004%	max.

Cat No.	Package	Size
AR1231-P500G	Plastic	500 G
AR1231-P5KG	Plastic	5 KG

Cat No.	Package	Size
AR1231-P25KG	Plastic	25 KG

## AMMONIUM CHLORIDE



NH <sub>4</sub> Cl	FW. 53.49	Density =	1.52 g/cm <sup>3</sup>
CAS-No.	12125-02-9	Melting Point	335 °C
EC No.	235-186-4	EC-Index-No	017-014-00-8
GHS:	H302, H319; P264, P270, P280, P301 + P312, P305 + P351 + P338, P330, P337 + P313		



## Ammonium Chloride, AR

Code AR1011

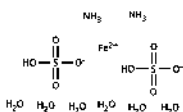
## Specifications

Description	White crystalline powder	Pyridine and homologues	0.001%	max.
Assay	99.5% min.	Arsenic (As)	0.00005%	max.
pH (5% Solution)	4.5- 5.5	Calcium (Ca)	0.001%	max.
Insoluble matter	0.001% max.	Iron (Fe)	0.0002%	max.
Non-volatile matter	0.005% max.	Lead (Pb)	0.0002%	max.
Iodide (I)	0.001% max.	Potassium (K)	0.005%	max.
Phosphate (PO <sub>4</sub> )	0.0003% max.	Sodium (Na)	0.005%	max.
Sulfate (SO <sub>4</sub> )	0.002% max.			

Cat No.	Package	Size
AR1011-P500G	Plastic	500 G
AR1011-P5KG	Plastic	5 KG

Cat No.	Package	Size
AR1011-P25KG	Plastic	25 KG

## AMMONIUM FERROUS (II) SULFATE HEXAHYDRATE



Fe(NH <sub>4</sub> ) <sub>2</sub> (SO <sub>4</sub> ) <sub>2</sub> .6H <sub>2</sub> O	FW. 392.14	Density =	1.86 g/cm <sup>3</sup>
CAS-No.	7783-85-9	Melting Point	100 °C
EC No.	233-151-8		

## Ammonium Ferrous (II) Sulfate Hexahydrate, AR

Code AR1012

## Specifications

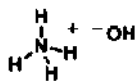
Description	Greenish blue crystals / crystalline powder	Copper (Cu)	0.002%	max.
Assay	99.0 - 101.0%	Lead (Pb)	0.002%	max.
Reaction	Not less than pH 3.5	Manganese (Mn)	0.05%	max.
Insoluble matter	0.003% max.	Potassium (K)	0.02%	max.
Chloride (Cl)	0.001% max.	Sodium (Na)	0.02%	max.
Ferric iron (Fe)	0.02% max.	Zinc (Zn)	0.006%	max.

Cat No.	Package	Size
AR1012-P500G	Plastic	500 G





## AMMONIUM HYDROXIDE 25% SOLUTION



NH<sub>4</sub>OH      FW. 35.05  
 CAS-No.      1336-21-6  
 Boiling Point      37.7 °C

Density 1 L =      0.903 Kg.  
 Melting Point      - 57.5 °C

### Ammonium Hydroxide 25% Solution, Pharma

Code BP1304

#### Specifications

( Meet Ph.Eur. )

Assay (by acidimetry)	25 - 30%
Identification	Passes test
Solubility	Passes test
Appearance of solution	Clear and colorless
Carbonates	60 ppm max.
Residue on Evaporation	20 ppm max.
Substances reducing permanganate	Passes test

Oxidisable substances	Passes test
Pyridine and related substances	2 ppm max.
Chloride (Cl)	1 ppm max.
Sulfate (SO <sub>4</sub> )	5 ppm max.
Heavy metals (as Pb)	1 ppm max.
Iron (Fe)	0.25 ppm max.

Cat No.	Package	Size
BP1304-G500ML	Amber Glass	500 ML
BP1304-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
BP1304-G2.5L	Amber Glass	2.5 Litre

### Ammonium Hydroxide 25% Solution, AR

Code AR1304

#### Specifications

Assay (by acidimetry)	25%	min.
Appearance	Passes test	
Color (APHA)	10	max.
Carbon dioxide (CO <sub>2</sub> )	20	ppm max.
Residue after Ignition	20	ppm max.
Substances reducing permanganate	Passes test	
Chloride (Cl)	0.5	ppm max.
Nitrate (NO <sub>3</sub> )	2	ppm max.
Phosphate (PO <sub>4</sub> )	2	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Aluminium (Al)	0.05	ppm max.
Barium (Ba)	0.01	ppm max.
Cadmium (Cd)	0.05	ppm max.

Calcium (Ca)	0.05	ppm max.
Chromium (Cr)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Iron (Fe)	0.2	ppm max.
Lead (Pb)	0.02	ppm max.
Lithium (Li)	0.05	ppm max.
Magnesium (Mg)	0.01	ppm max.
Manganese (Mn)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Potassium (K)	0.1	ppm max.
Sodium (Na)	0.1	ppm max.
Tin (Sn)	0.01	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
AR1304-G2.5L	Amber Glass	2.5 Litre



## Ammonium Hydroxide 25% Solution, RCI Premium

Code RP1304

## Specifications

Assay (by acidimetry)	25.0%	min.
Appearance	Passes test	
Color (APHA)	10	max.
Carbon dioxide (CO <sub>2</sub> )	20	ppm max.
Residue after Ignition	10	ppm max.
Substances reducing permanganate	Passes test	
Chloride (Cl)	0.5	ppm max.
Nitrate (NO <sub>3</sub> )	2	ppm max.
Phosphate (PO <sub>4</sub> )	2	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Heavy metals (as Pb)	0.5	ppm max.
Aluminium (Al)	0.05	ppm max.
Arsenic (As)	0.05	ppm max.
Barium (Ba)	0.01	ppm max.
Beryllium (Be)	0.01	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.1	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.01	ppm max.

Copper (Cu)	0.02	ppm max.
Gold (Au)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.02	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.02	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Potassium (K)	0.1	ppm max.
Silver (Ag)	0.01	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.02	ppm max.
Thallium (Tl)	0.02	ppm max.
Tin (Sn)	0.01	ppm max.
Titanium (Ti)	0.05	ppm max.
Vanadium (V)	0.01	ppm max.
Zinc (Zn)	0.05	ppm max.
Zirconium (Zr)	0.02	ppm max.

Cat No.	Package	Size
RP1304-G500ML	Amber Glass	500 ML

Cat No.	Package	Size
RP1304-G2.5L	Amber Glass	2.5 Litre

## Ammonium Hydroxide 25% Solution, Electropure

Code EP1304

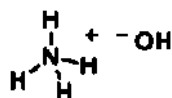
## Specifications

Assay (by acidimetry)	25.0%	min.
Appearance	Passes test	
Color (APHA)	10	max.
Carbon dioxide (CO <sub>2</sub> )	20	ppm max.
Residue after Ignition	10	ppm max.
Substances reducing permanganate	Passes test	
Chloride (Cl)	0.3	ppm max.
Nitrate (NO <sub>3</sub> )	1	ppm max.
Phosphate (PO <sub>4</sub> )	2	ppm max.
Sulfate (SO <sub>4</sub> )	0.3	ppm max.
Heavy metals (as Pb)	0.2	ppm max.
Aluminium (Al)	0.05	ppm max.
Arsenic (As)	0.05	ppm max.
Barium (Ba)	0.01	ppm max.
Beryllium (Be)	0.01	ppm max.
Bismuth (Bi)	0.02	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.01	ppm max.
Calcium (Ca)	0.1	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.01	ppm max.

Copper (Cu)	0.02	ppm max.
Gallium (Ga)	0.01	ppm max.
Germanium (Ge)	0.05	ppm max.
Gold (Au)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.01	ppm max.
Lithium (Li)	0.01	ppm max.
Magnesium (Mg)	0.02	ppm max.
Manganese (Mn)	0.005	ppm max.
Molybdenum (Mo)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Potassium (K)	0.1	ppm max.
Silver (Ag)	0.005	ppm max.
Sodium (Na)	0.1	ppm max.
Thallium (Tl)	0.01	ppm max.
Tin (Sn)	0.01	ppm max.
Titanium (Ti)	0.01	ppm max.
Vanadium (V)	0.01	ppm max.
Zinc (Zn)	0.02	ppm max.
Zirconium (Zr)	0.02	ppm max.

Cat No.	Package	Size
EP1304-G2.5L	Amber Glass	2.5 Litre

## AMMONIUM HYDROXIDE 28% SOLUTION



NH<sub>4</sub>OH      FW. 35.05  
 CAS-No.      1336-21-6  
 Boiling Point      32 °C

Density 1 L =      0.900 Kg.  
 Melting Point      - 72 °C

### Ammonium Hydroxide 28% Solution, AR

Code AR1404

#### Specifications

Assay (by acidimetry)	28%	min.
Appearance	Passes test	
Color (APHA)	10	max.
Carbon dioxide (CO <sub>2</sub> )	20	ppm max.
Residue after Ignition	20	ppm max.
Substances reducing permanganate	Passes test	
Chloride (Cl)	0.5	ppm max.
Nitrate (NO <sub>3</sub> )	2	ppm max.
Phosphate (PO <sub>4</sub> )	2	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Heavy metals (as Pb)	0.5	ppm max.
Aluminium (Al)	0.05	ppm max.
Barium (Ba)	0.01	ppm max.
Cadmium (Cd)	0.05	ppm max.

#### (Meet A.C.S. Specifications)

Calcium (Ca)	0.1	ppm max.
Chromium (Cr)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.02	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.02	ppm max.
Manganese (Mn)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Potassium (K)	0.1	ppm max.
Sodium (Na)	0.5	ppm max.
Tin (Sn)	0.01	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
AR1404-G500ML	Amber Glass	500 ML

Cat No.	Package	Size
AR1404-G2.5L	Amber Glass	2.5 Litre

### Ammonium Hydroxide 28% Solution, RCI Premium

Code RP1404

#### Specifications

Assay (by acidimetry)	28%	min.
Appearance	Passes test	
Color (APHA)	10	max.
Carbon dioxide (CO <sub>2</sub> )	20	ppm max.
Residue after Ignition	10	ppm max.
Substances reducing permanganate	Passes test	
Chloride (Cl)	0.5	ppm max.
Nitrate (NO <sub>3</sub> )	2	ppm max.
Phosphate (PO <sub>4</sub> )	2	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Heavy metals (as Pb)	0.5	ppm max.
Aluminium (Al)	0.05	ppm max.
Arsenic (As)	0.05	ppm max.
Barium (Ba)	0.01	ppm max.
Beryllium (Be)	0.01	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.1	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.01	ppm max.

#### (Meet A.C.S. Specifications)

Copper (Cu)	0.02	ppm max.
Gold (Au)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.02	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.02	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Potassium (K)	0.1	ppm max.
Silver (Ag)	0.01	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.02	ppm max.
Thallium (Tl)	0.02	ppm max.
Tin (Sn)	0.01	ppm max.
Titanium (Ti)	0.05	ppm max.
Vanadium (V)	0.01	ppm max.
Zinc (Zn)	0.05	ppm max.
Zirconium (Zr)	0.02	ppm max.

Cat No.	Package	Size
RP1404-G500ML	Amber Glass	500 ML

Cat No.	Package	Size
RP1404-G2.5L	Amber Glass	2.5 Litre

## Ammonium Hydroxide 28% Solution, Electropure

Code EP1404

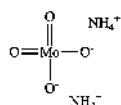
## Specifications

(Meet A.C.S. Specifications)

Assay (by acidimetry)	28%	min.	Copper (Cu)	0.02	ppm max.
Appearance	Passes test		Gallium (Ga)	0.01	ppm max.
Color (APHA)	10	max.	Germanium (Ge)	0.05	ppm max.
Carbon dioxide (CO <sub>2</sub> )	20	ppm max.	Gold (Au)	0.01	ppm max.
Residue after Ignition	10	ppm max.	Iron (Fe)	0.05	ppm max.
Substances reducing permanganate	Passes test		Lead (Pb)	0.01	ppm max.
Chloride (Cl)	0.3	ppm max.	Lithium (Li)	0.01	ppm max.
Nitrate (NO <sub>3</sub> )	1	ppm max.	Magnesium (Mg)	0.02	ppm max.
Phosphate (PO <sub>4</sub> )	2	ppm max.	Manganese (Mn)	0.005	ppm max.
Sulfate (SO <sub>4</sub> )	0.3	ppm max.	Molybdenum (Mo)	0.01	ppm max.
Heavy metals (as Pb)	0.2	ppm max.	Nickel (Ni)	0.01	ppm max.
Aluminium (Al)	0.05	ppm max.	Potassium (K)	0.1	ppm max.
Arsenic (As)	0.05	ppm max.	Silver (Ag)	0.005	ppm max.
Barium (Ba)	0.01	ppm max.	Sodium (Na)	0.1	ppm max.
Beryllium (Be)	0.01	ppm max.	Thallium (Tl)	0.01	ppm max.
Bismuth (Bi)	0.02	ppm max.	Tin (Sn)	0.01	ppm max.
Boron (B)	0.01	ppm max.	Titanium (Ti)	0.01	ppm max.
Cadmium (Cd)	0.01	ppm max.	Vanadium (V)	0.01	ppm max.
Calcium (Ca)	0.1	ppm max.	Zinc (Zn)	0.02	ppm max.
Chromium (Cr)	0.02	ppm max.	Zirconium (Zr)	0.02	ppm max.
Cobalt (Co)	0.01	ppm max.			

Cat No.	Package	Size
EP1404-G2.5L	Amber Glass	2.5 Litre

## AMMONIUM MOLYBDATE TETRAHYDRATE



(NH <sub>4</sub> ) <sub>6</sub> Mo <sub>7</sub> O <sub>24</sub> ·4H <sub>2</sub> O	FW. 1235.86	Density =	2.498 g/cm <sup>3</sup>
CAS-No.	12054-85-2	Melting Point	90 °C
EC No.	234-722-4		
GHS:	H302, H315, H319, H335; P261, P264, P270, P271, P280, P301 + P312, P302 + P352, P304 + P340, P305 + P351 + P338, P330, P332 + P313, P362, P337 + P313, P403 + P233, P405		



## Ammonium Molybdate Tetrahydrate, AR

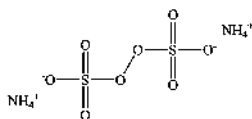
Code AR1013

## Specifications

Description	White crystalline powder	Nitrate (NO <sub>3</sub> )	0.002%	max.	
Assay	99.0%	min.	Sulfate (SO <sub>4</sub> )	0.005%	max.
Arsenate phosphate & Silicate (PO <sub>4</sub> )	0.0003%	max.	Copper (Cu)	0.001%	max.
Insoluble matter	0.005%	max.	Iron (Fe)	0.001%	max.
Chloride (Cl)	0.0005%	max.	Lead (Pb)	0.001%	max.

Cat No.	Package	Size
AR1013-P500G	Plastic	500 G

## AMMONIUM PERSULFATE



$(\text{NH}_4)_2\text{S}_2\text{O}_8$  FW. 228.19 Density = 1.98 g/cm<sup>3</sup>  
 CAS-No. 7727-54-0 Melting Point 120 °C  
 EC No. 231-786-5 EC-Index-No 016-060-00-6  
 Class: 5.1 Packaging Group: III  
 GHS: H272, H302, H315, H317, H319, H334, H335; P210, P220, P221, P261, P264, P270, P271, P272, P280, P285, P301 + P312, P302 + P352, P304 + P341, P305 + P351 + P338, P330, P333 + P313, P337 + P313, P342 + P311, P362, P403 + P233, P405



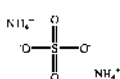
### Ammonium Persulfate, AR Code AR1014

Specifications					
Description	A white crystalline powder		Iron (Fe)	0.0005%	max.
Assay	99.0%	min.	Lead (Pb)	0.001%	max.
Acidity	0.1%	max.	Magnesium (Mg)	0.001%	max.
Water insoluble matter	0.003%	max.	Manganese (Mn)	0.00005%	max.
Chloride (Cl)	0.0005%	max.	Potassium (K)	0.02%	max.
Calcium (Ca)	0.001%	max.	Sodium (Na)	0.005%	max.
Copper (Cu)	0.0005%	max.			

Cat No.	Package	Size	Cat No.	Package	Size
AR1014-P500G	Plastic	500 G	AR1014-P5KG	Plastic	5 KG
AR1014-P1KG	Plastic	1 KG	AR1014-P25 KG	Plastic	25 KG

## AMMONIUM SULFATE



$(\text{NH}_4)_2\text{SO}_4$  FW. 132.14 Density = 1.77 g/cm<sup>3</sup>  
 CAS-No. 7783-20-2  
 EC No. 231-984-1

### Ammonium Sulfate, AR Code AR1015

Specifications				(Meet A.C.S. Specifications)	
Assay	99.0%	min.	Chloride (Cl)	5	ppm max.
pH of a 5% solution at 25° C	5.0 - 6.0		Phosphate (PO <sub>4</sub> )	5	ppm max.
Insoluble matter	0.01%	max.	Heavy metals (as Pb)	5	ppm max.
Residue after Ignition	0.01%	max.	Iron (Fe)	5	ppm max.
Nitrate (NO <sub>3</sub> )	0.001%	max.			

Cat No.	Package	Size	Cat No.	Package	Size
AR1015-P500G	Plastic	500 G	AR1015-P5KG	Plastic	5 KG
AR1015-P1KG	Plastic	1 KG	AR1015-P25 KG	Plastic	25 KG

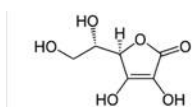
### Ammonium Sulfate, RCI Premium Code RP1015

Specifications					
Description	Colorless Crystal		Phosphate (PO <sub>4</sub> )	0.0005%	max.
Assay (acidimetric on dried substances)	99.5%	min.	Arsenic (As)	0.00002%	max.
Reaction	Not less than pH 4.5		Calcium (Ca)	0.001%	max.
Loss on drying at 100° C	0.1%	max.	Copper (Cu)	0.0002%	max.
Insoluble matter	0.001%	max.	Iron (Fe)	0.0002%	max.
Non-volatile matter	0.01%	max.	Lead (Pb)	0.0002%	max.
Chloride (Cl)	0.0003%	max.	Magnesium (Mg)	0.0005%	max.
Nitrate (NO <sub>3</sub> )	0.001%	max.			

Cat No.	Package	Size	Cat No.	Package	Size
RP1015-P500G	Plastic	500 G	RP1015-P5KG	Plastic	5 KG
RP1015-P1KG	Plastic	1 KG	RP1015-P25 KG	Plastic	25 KG

## ASCORBIC ACID



C<sub>6</sub>H<sub>8</sub>O<sub>6</sub>  
CAS-No. 50-81-7  
EC No. 200-066-2

Density = 1.65 g/cm<sup>3</sup>  
Melting Point 190 C°

### Ascorbic acid, Pharma

Code BP1299

#### Specifications

Characteristics	White or almost white, crystalline powder or colorless crystals
Identification	IR : Complies CA : Positive
Clarity of Solution	Clear
Color of Solution	BY <sub>7</sub> max.
Assay	99.0% - 100.5%
Acidity (pH)	2.1 - 2.6
Sulfated ash	0.1% max.
Specific Rotation	+20.5° - +21.5°
Heavy Metals	0.001% max.
Oxalic Acid	0.2% max.
Copper (Cu)	0.0005% max.
Iron (Fe)	0.0002% max.

Related Substances		
- Impurity C	0.15%	max.
- Impurity D	0.15%	max.
- Unspecified Impurities	0.10%	max.
- Total	0.2%	max.
Residual Solvent		
- Ethanol	0.5%	max.
- Methanol	0.3%	max.
Particle-Size		
- More than 40 mesh	30%	max.
- Between 40 and 80 mesh	45%	min.
Arsenic (As)	0.0003%	max.
Lead (Pb)	0.0002%	max.
Mercury (Hg)	0.0001%	max.
Acidity (pH) (2% aqueous solution)	2.4 - 2.8	
Loss on Drying	0.4%	max.

Cat No.	Package	Size
BP1299-P5KG	Plastic	5 KG

Cat No.	Package	Size
BP1299-G25 KG	Plastic	25 KG

### Ascorbic acid, AR

Code AR1299

#### Specifications

( Meet A.C.S. Specifications )

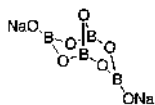
Characteristics	White or almost white, crystalline powder
Identification	Positive reaction
Clarity of Solution	Clear
Color of Solution	BY <sub>7</sub> max.
Assay	99.0% - 100.5%
Characteristics	99.0% - 100.5%
pH	2.1 - 2.6
Sulfated ash	0.1% max.
Specific Rotation	+20.5° - +21.5°

Oxalic Acid	0.2%	max.
Loss on Drying	0.4%	max.
Organic volatile impurities	Pass	
Heavy Metals	0.001%	max.
Arsenic (As)	0.0003%	max.
Cadmium (Cd)	0.0001%	max.
Copper (Cu)	0.0005%	max.
Iron (Fe)	0.0002%	max.
Lead (Pb)	0.0002%	max.
Mercury (Hg)	0.00001%	max.

Cat No.	Package	Size
AR1299-P500G	Plastic	500 G
AR1299-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1299-P5KG	Plastic	5 KG
AR1299-P25 KG	Plastic	25 KG

## BORAX



Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> ·10H <sub>2</sub> O	FW. 381.37	Density =	1.72 g/cm <sup>3</sup>
CAS-No.	1303-96-4	Melting Point	75 °C
EC No.	215-540-4	EC-Index-No	005-011-01-1
GHS:	H360FD; P201, P202, P281, P308 + P313, P405		



### Borax, AR (di-Sodium tetraborate decahydrate)

Code AR1233

#### Specifications

Assay	99.5%	min.	Heavy metals (as Pb)	0.001%	max.
Substances insoluble in hydrochloric acid	0.005%	max.	Calcium (Ca)	0.005%	max.
Chloride (Cl)	0.002%	max.	Copper (Cu)	0.001%	max.
Phosphate (PO <sub>4</sub> )	0.002%	max.	Iron (Fe)	0.0005%	max.
Sulfate (SO <sub>4</sub> )	0.01%	max.			

Cat No.	Package	Size
AR1233-P500G	Plastic	500 G
AR1233-P5KG	Plastic	5 KG

Cat No.	Package	Size
AR1233-P25KG	Plastic	25 KG

### Boric Acid, Pharma

Code BP1234

#### Specifications

( Meet Ph.Eur,BP,USP )

Assay	99.5%	min.	Chloride (Cl)	0.0005%	max.
Appearance of solution	Clear and Colorless		Phosphate (PO <sub>4</sub> )	0.0005%	max.
Solubility in ethanol (96%)	Passes test		Sulfate (SO <sub>4</sub> )	0.002%	max.
Organic matter	Passes test		Arsenic (As)	0.0001%	max.
pH (20 °C, 3.3%)	3.8-4.8		Calcium (Ca)	0.002%	max.
Loss on drying (Silica gel)	0.5%	max.	Iron (Fe)	0.0005%	max.
Heavy metals (as Pb)	0.001%	max.	Lead (Pb)	0.001%	max.

Cat No.	Package	Size
BP1234-P500G	Plastic	500 G





## Boric Acid, AR

Code AR1234

### Specifications

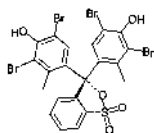
Assay	99.5%	min.
Appearance of solution	Passes test	
Substances insoluble in ethanol	Passes test	
Chloride (Cl)	0.0005%	max.
Phosphate (PO <sub>4</sub> )	0.0005%	max.

Sulfate (SO <sub>4</sub> )	0.002%	max.
Arsenic (As)	0.0001%	max.
Calcium (Ca)	0.002%	max.
Iron (Fe)	0.0005%	max.
Lead (Pb)	0.001%	max.

Cat No.	Package	Size
AR1234-P500G	Plastic	500 G
AR1234-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1234-P5KG	Plastic	5 KG
AR1234-P25KG	Plastic	25 KG

## BROMOCRESOL GREEN



C<sub>21</sub>H<sub>14</sub>Br<sub>2</sub>O<sub>5</sub>S  
 CAS-No. 76-60-8  
 EC No. 200-972-8

Melting Point 217-218 °C

## Bromocresol Green Indicator

Code AR1251

### Specifications

Appearance	White or yellow-brown powder
------------	------------------------------

Solubility in Ethanol	Passes test
Transition range pH: Yellow to blue	3.8 - 5.4

Cat No.	Package	Size
AR1251-G25G	Amber Glass	25 G



## BUFFER SOLUTION pH 4.0

Code GN1016

### Specifications

Appearance	Clear, colorless solution
pH at 25°C	pH 4.00 ± 0.02

Traceable to NIST

Deviations of pH ( $\Delta$ pH) at various temperatures:		$\Delta$ pH
5° C	- 0.01	
10° C	- 0.01	
15° C	- 0.01	

Cat No.	Package	Size
GN1016-P1L	Plastic	1 L
GN1016-P2.5L	Plastic	2.5 L

Deviations of pH ( $\Delta$ pH) at various temperatures:

	$\Delta$ pH
20° C	- 0.01
25° C	± 0
30° C	+ 0.01
35° C	+ 0.02
40° C	+ 0.02
50° C	+ 0.03

Cat No.	Package	Size
GN1016-P4L	Plastic	4 L

## BUFFER SOLUTION pH 4.0 (Red)

Code GN1017

### Specifications

Appearance	Clear, red solution
pH at 25°C	pH 4.00 ± 0.02

Traceable to NIST

Deviations of pH ( $\Delta$ pH) at various temperatures:		$\Delta$ pH
5° C	- 0.01	
10° C	- 0.01	
15° C	- 0.01	

Cat No.	Package	Size
GN1017-P1L	Plastic	1 L
GN1017-P2.5L	Plastic	2.5 L

Deviations of pH ( $\Delta$ pH) at various temperatures:

	$\Delta$ pH
20° C	- 0.01
25° C	± 0
30° C	+ 0.01
35° C	+ 0.02
40° C	+ 0.02
50° C	+ 0.03

Cat No.	Package	Size
GN1017-P4L	Plastic	4 L

## BUFFER SOLUTION pH 4.01

Code GN1018

### Specifications

Appearance	Clear, colorless solution
pH at 25°C	pH 4.01 ± 0.02

Traceable to NIST

Deviations of pH ( $\Delta$ pH) at various temperatures:		$\Delta$ pH
5° C	- 0.01	
10° C	- 0.01	
15° C	- 0.01	

Cat No.	Package	Size
GN1018-P1L	Plastic	1 L
GN1018-P2.5L	Plastic	2.5 L

Deviations of pH ( $\Delta$ pH) at various temperatures:

	$\Delta$ pH
20° C	- 0.01
25° C	± 0
30° C	+ 0.01
35° C	+ 0.02
40° C	+ 0.02
50° C	+ 0.03

Cat No.	Package	Size
GN1018-P4L	Plastic	4 L

## BUFFER SOLUTION pH 6.86

Code GN1019

### Specifications

Appearance	Clear, colorless solution
pH at 25°C	pH 6.86 ± 0.02

#### Traceable to NIST

Deviations of pH ( $\Delta$ pH) at various temperatures:

	$\Delta$ pH
5°C	+ 0.04
10°C	+ 0.03
15°C	+ 0.02

Cat No.	Package	Size
GN1019-P1L	Plastic	1 L
GN1019-P2.5L	Plastic	2.5 L

Deviations of pH ( $\Delta$ pH) at various temperatures:

	$\Delta$ pH
20°C	+ 0.01
25°C	± 0
30°C	- 0.01
35°C	- 0.02
40°C	- 0.02
50°C	- 0.03

Cat No.	Package	Size
GN1019-P4L	Plastic	4 L

## BUFFER SOLUTION pH 7.0

Code GN1020

### Specifications

Appearance	Clear, colorless solution
pH at 25°C	pH 7.00 ± 0.02

#### Traceable to NIST

Deviations of pH ( $\Delta$ pH) at various temperatures:

	$\Delta$ pH
5°C	+ 0.04
10°C	+ 0.02
15°C	+ 0.01

Cat No.	Package	Size
GN1020-P1L	Plastic	1 L
GN1020-P2.5L	Plastic	2.5 L

Deviations of pH ( $\Delta$ pH) at various temperatures:

	$\Delta$ pH
20°C	+ 0.01
25°C	± 0
30°C	- 0.01
35°C	- 0.01
40°C	- 0.02
50°C	- 0.02

Cat No.	Package	Size
GN1020-P4L	Plastic	4 L

## BUFFER SOLUTION pH 7.0 (YELLOW)

Code GN1021

### Specifications

Appearance	Clear, yellow solution
pH at 25°C	pH 7.00 ± 0.02

#### Traceable to NIST

Deviations of pH ( $\Delta$ pH) at various temperatures:

	$\Delta$ pH
5°C	+ 0.04
10°C	+ 0.02
15°C	+ 0.01

Cat No.	Package	Size
GN1021-P1L	Plastic	1 L
GN1021-P2.5L	Plastic	2.5 L

Deviations of pH ( $\Delta$ pH) at various temperatures:

	$\Delta$ pH
20°C	+ 0.01
25°C	± 0
30°C	- 0.01
35°C	- 0.01
40°C	- 0.02
50°C	- 0.02

Cat No.	Package	Size
GN1021-P4L	Plastic	4 L

## BUFFER SOLUTION pH 7.0 (GREEN)

Code GN1302

### Specifications

Appearance	Clear, green solution	
pH at 25°C	pH 7.00 ± 0.02	
Traceable to NIST		
Deviations of pH ( $\Delta$ pH) at various temperatures:		
	$\Delta$ pH	
	5° C	+ 0.04
	10° C	+ 0.02
	15° C	+ 0.01

Deviations of pH ( $\Delta$ pH) at various temperatures:		
	$\Delta$ pH	
	20° C	+ 0.01
	25° C	± 0
	30° C	- 0.01
	35° C	- 0.01
	40° C	- 0.02
	50° C	- 0.02

Cat No.	Package	Size
GN1302-P1L	Plastic	1 L
GN1302-P2.5L	Plastic	2.5 L

Cat No.	Package	Size
GN1302-P4L	Plastic	4 L

## BUFFER SOLUTION pH 9.0

Code GN1036

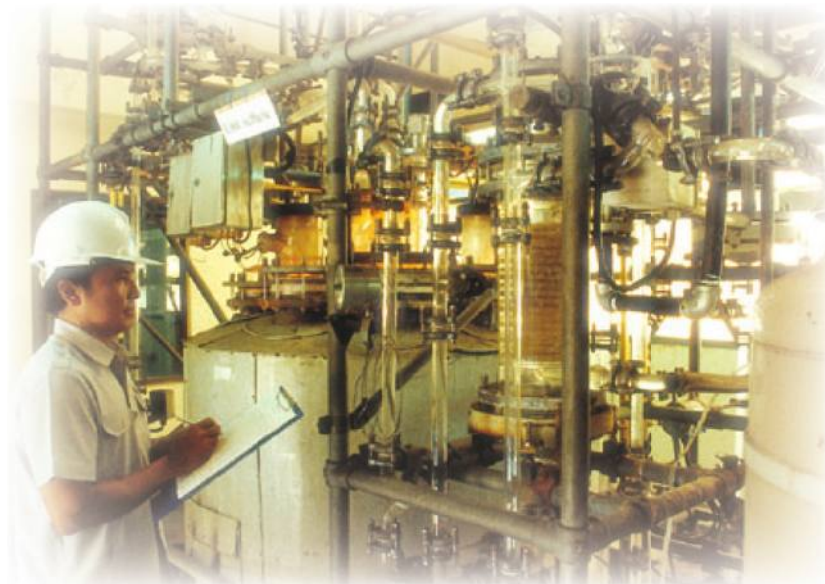
### Specifications

Appearance	Clear, colorless solution	
pH at 25°C	pH 9.00 ± 0.02	
Traceable to NIST		
Deviations of pH ( $\Delta$ pH) at various temperatures:		
	$\Delta$ pH	
	5° C	+ 0.20
	10° C	+ 0.14
	15° C	+ 0.10

Deviations of pH ( $\Delta$ pH) at various temperatures:		
	$\Delta$ pH	
	20° C	+ 0.04
	25° C	± 0
	30° C	- 0.04
	35° C	- 0.07
	40° C	- 0.10
	50° C	- 0.16

Cat No.	Package	Size
GN1036-P1L	Plastic	1 L
GN1036-P2.5L	Plastic	2.5 L

Cat No.	Package	Size
GN1036-P4L	Plastic	4 L



## BUFFER SOLUTION pH 10.0

Code GN1022

### Specifications

Appearance	Clear, colorless solution	
pH at 25°C	pH 10.00 ± 0.02	
Traceable to NIST		
Deviations of pH ( $\Delta$ pH) at various temperatures:		
	$\Delta$ pH	
5° C	+ 0.20	
10° C	+ 0.11	
15° C	+ 0.07	

Cat No.	Package	Size
GN1022-P1L	Plastic	1 L
GN1022-P2.5L	Plastic	2.5 L

Deviations of pH ( $\Delta$ pH) at various temperatures:		
	$\Delta$ pH	
20° C	+ 0.04	
25° C	± 0	
30° C	- 0.09	
35° C	- 0.12	
40° C	- 0.15	
50° C	- 0.20	

Cat No.	Package	Size
GN1022-P4L	Plastic	4 L

## BUFFER SOLUTION pH 10.0 (BLUE)

Code GN1023

### Specifications

Appearance	Clear, blue solution	
pH at 25°C	pH 10.00 ± 0.02	
Traceable to NIST		
Deviations of pH ( $\Delta$ pH) at various temperatures:		
	$\Delta$ pH	
5° C	+ 0.20	
10° C	+ 0.11	
15° C	+ 0.07	

Cat No.	Package	Size
GN1023-P1L	Plastic	1 L
GN1023-P2.5L	Plastic	2.5 L

Deviations of pH ( $\Delta$ pH) at various temperatures:		
	$\Delta$ pH	
20° C	+ 0.04	
25° C	± 0	
30° C	- 0.09	
35° C	- 0.12	
40° C	- 0.15	
50° C	- 0.20	

Cat No.	Package	Size
GN1023-P4L	Plastic	4 L



## BUFFER SOLUTION pH 10.01

Code GN1285

### Specifications

Appearance	Clear, colorless solution	
pH at 25°C	pH 10.01 ± 0.02	
Traceable to NIST		
Deviations of pH ( $\Delta$ pH) at various temperatures:		
	$\Delta$ pH	
	5° C	+ 0.20
	10° C	+ 0.11
	15° C	+ 0.07

Deviations of pH ( $\Delta$ pH) at various temperatures:		
	$\Delta$ pH	
	20° C	+ 0.04
	25° C	± 0
	30° C	- 0.09
	35° C	- 0.12
	40° C	- 0.15
	50° C	- 0.20

Cat No.	Package	Size
GN1285-P1L	Plastic	1 Litre
GN1285-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
GN1285-P4L	Plastic	4 Litre

## BUFFER SOLUTION pH 12.45

Code GN1286

### Specifications

Appearance	Clear, colorless solution	
pH at 25°C	pH 12.45 ± 0.02	
Traceable to NIST		
Deviations of pH ( $\Delta$ pH) at various temperatures:		
	$\Delta$ pH	
	5° C	+ 0.72
	10° C	+ 0.58
	15° C	+ 0.35

Deviations of pH ( $\Delta$ pH) at various temperatures:		
	$\Delta$ pH	
	20° C	+ 0.17
	25° C	± 0
	30° C	- 0.18
	35° C	- 0.39
	40° C	- 0.55
	50° C	- 0.80

Cat No.	Package	Size
GN1286-P1L	Plastic	1 Litre
GN1286-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
GN1286-P4L	Plastic	4 Litre



## BUTAN-1-OL



CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> OH	FW. 74.12	Density 1 L =	0.810 Kg.
CAS-No.	71-36-3	Melting Point	-89.5 °C°
UN No.	1120	Boiling Point	117 °C
EC No.	200-751-6	EC-Index-No	603-004-00-6
Class:	3	Packaging Group:	III
GHS:	H226, H302, H315, H318, H335, H336; P210, P233, P240, P241, P242, P243, P261, P264, P270, P271, P280, P301 + P312, P302 + P352, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P330, P332 + P313, P362, P370 + P378, P403 + P235, P405		



### Butan-1-ol, AR

Code AR1024

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.4%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.1%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.001%	max.
Butyl ether (GC.)	0.1%	max.
Aldehydes and Ketones	0.002%	max.
Carbonyl Compounds (as butyraldehyde)	0.01%	max.

Cat No.	Package	Size
AR1024-G500ML	Amber Glass	500 ML
AR1024-G1L	Amber Glass	1 Litre
AR1024-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1024-G4L	Amber Glass	4 Litre
AR1024-M25L	Metal	25 Litre
AR1024-M200L	Metal	200 Litre

### Butan-1-ol, RCI Premium

Code RP1024

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Appearance	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.1%	max.
Acidity (mEq./g.)	0.0008	max.
Residue on Evaporation	0.001%	max.
Butan-2-ol (GC.)	0.05%	max.
Butyl ether (GC.)	0.1%	max.
Butyraldehyde (GC.)	0.01%	max.
Dibutyl ether (GC.)	0.1%	max.
Isobutanol (GC.)	0.15%	max.
Aldehydes & Ketones	0.002%	max.
Carbonyl Compounds (as butyraldehyde)	0.01%	max.
Readily carbonizable substances	Passes test	

Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1024-G500ML	Amber Glass	500 ML
RP1024-G1L	Amber Glass	1 Litre
RP1024-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1024-G4L	Amber Glass	4 Litre
RP1024-M25L	Metal	25 Litre
RP1024-M200L	Metal	200 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**Butan-1-ol, UV-IR**

Code IR1024

**Specifications**

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
270 nm	99%	min.

250 nm	95%	min.
230 nm	60%	min.
220 nm	30%	min.
Fluorescence (as quinine)		
at 254 nm	2	ppb max.
at 365 nm	2	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1024-G500ML	Amber Glass	500 ML
IR1024-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1024-G2.5L	Amber Glass	2.5 Litre
IR1024-G4L	Amber Glass	4 Litre

**Butan-1-ol, HPLC**

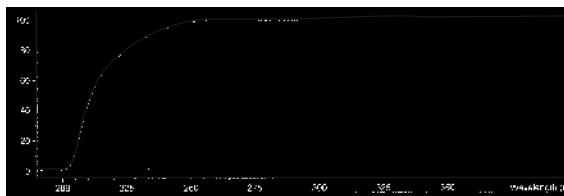
Code LC1024

**Specifications**

Assay (by GC.)	99.8%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
310 nm	99%	min.
260 nm	95%	min.
250 nm	90%	min.
240 nm	80%	min.
230 nm	65%	min.

Fluorescence (as quinine)		
at 254 nm	2	ppb max.
at 365 nm	2	ppb max.

Product passed through 0.2 micron final filter.



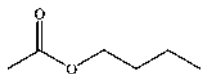
Cat No.	Package	Size
LC1024-G500ML	Amber Glass	500 ML
LC1024-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1024-G2.5L	Amber Glass	2.5 Litre
LC1024-G4L	Amber Glass	4 Litre





## n-BUTYL ACETATE



CH <sub>3</sub> COO(CH <sub>2</sub> ) <sub>3</sub> CH <sub>3</sub>	FW. 116.16	Density 1 L =	0.880 Kg.
CAS-No.	123-86-4	Melting Point	-76 °C
UN No.	1123	Boiling Point	126 °C
EC No.	204-658-1	EC-Index-No	607-025-00-1
Class:	3	Packaging Group:	III
GHS:	H226, H336, EUH066; P210, P233, P240, P241, P242, P243, P261, P271, P280, P303 + P361 + P353, P304 + P340, P312, P370 + P378, P403 + P235, P405		



### n-Butyl Acetate, AR

Code AR1025

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.1%	max.

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
Substances darkened by sulfuric acid	Passes test	

Cat No.	Package	Size
AR1025-G500ML	Amber Glass	500 ML
AR1025-G1L	Amber Glass	1 Litre
AR1025-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1025-G4L	Amber Glass	4 Litre
AR1025-M25L	Metal	25 Litre
AR1025-M200L	Metal	200 Litre

### n-Butyl Acetate, RCI Premium

Code RP1025

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
n-Butyl alcohol (GC.)	0.2%	max.
n-Butyl formate (GC.)	0.1%	max.
n-Butyl propionate (GC.)	0.1%	max.
Readily carbonizable substances	Passes test	
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.

Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1025-G500ML	Amber Glass	500 ML
RP1025-G1L	Amber Glass	1 Litre
RP1025-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1025-G4L	Amber Glass	4 Litre
RP1025-M25L	Metal	25 Litre
RP1025-M200L	Metal	200 Litre

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

## n-Butyl Acetate, HPLC

Code LC1025

### Specifications

Assay (by GC.)	99.5%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
360 nm	99%	min.

320 nm	95%	min.
300 nm	90%	min.
280 nm	80%	min.
260 nm	50%	min.
Fluorescence (as quinine)		
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
LC1025-G500ML	Amber Glass	500 ML
LC1025-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1025-G2.5L	Amber Glass	2.5 Litre
LC1025-G4L	Amber Glass	4 Litre

## n-Butyl Acetate, Electropure

Code EP1025

### Specifications

Assay (by GC.)	99.5%	min.
Identity	Corresponds to IR spectrum	
Water (by Coulometry)	0.05%	max.
Acidity (μEq./g.)	0.5	max.
Specific resistance (MΩ.cm)	5	min.
Residue on Evaporation	10	ppm max.
n-Butanol (GC.)	0.8%	max.
n-Butyl formate (GC.)	0.5%	max.
n-Butyl propionate (GC.)	0.5%	max.
Heavy metals (as Pb)	0.2	ppm max.
Aluminium (Al)	0.2	ppm max.
Antimony (Sb)	0.01	ppm max.
Arsenic (As)	0.01	ppm max.
Barium (Ba)	0.1	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.1	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.

Gallium (Ga)	0.02	ppm max.
Gold (Au)	0.1	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.05	ppm max.
Nickel (Ni)	0.02	ppm max.
Platinum (Pt)	0.2	ppm max.
Potassium (K)	0.1	ppm max.
Silver (Ag)	0.02	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.02	ppm max.
Thallium (Tl)	0.05	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.1	ppm max.
Vanadium (V)	0.05	ppm max.
Zinc (Zn)	0.1	ppm max.
Zirconium (Zr)	0.2	ppm max.

Cat No.	Package	Size
EP1025-G500ML	Amber Glass	500 ML
EP1025-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
EP1025-G2.5L	Amber Glass	2.5 Litre
EP1025-G4L	Amber Glass	4 Litre

## n-Butyl Acetate, VLSI

Code VL1025

## Specifications

Assay (by GC.)	99.5%	min.
Identity	Corresponds to IR spectrum	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity ( $\mu\text{Eq./g.}$ )	0.5	max.
Specific resistance ( $\text{M}\Omega\cdot\text{cm}$ )	5	min.
Residue on Evaporation	10	ppm max.
n-Butanol (GC.)	0.5%	max.
n-Butyl formate (GC.)	0.2%	max.
n-Butyl propionate (GC.)	0.2%	max.
Heavy metals (as Pb)	0.1	ppm max.
Aluminium (Al)	50	ppb max.
Antimony (Sb)	10	ppb max.
Arsenic (As)	10	ppb max.
Barium (Ba)	20	ppb max.
Beryllium (Be)	10	ppb max.
Bismuth (Bi)	20	ppb max.
Boron (B)	10	ppb max.
Cadmium (Cd)	10	ppb max.
Calcium (Ca)	100	ppb max.
Chromium (Cr)	10	ppb max.
Cobalt (Co)	10	ppb max.
Copper (Cu)	10	ppb max.
Gallium (Ga)	10	ppb max.
Gold (Au)	20	ppb max.

Indium (In)	10	ppb max.
Iron (Fe)	20	ppb max.
Lead (Pb)	10	ppb max.
Lithium (Li)	10	ppb max.
Magnesium (Mg)	20	ppb max.
Manganese (Mn)	10	ppb max.
Molybdenum (Mo)	10	ppb max.
Nickel (Ni)	10	ppb max.
Platinum (Pt)	50	ppb max.
Potassium (K)	20	ppb max.
Silver (Ag)	10	ppb max.
Sodium (Na)	100	ppb max.
Strontium (Sr)	10	ppb max.
Thallium (Tl)	10	ppb max.
Tin (Sn)	20	ppb max.
Titanium (Ti)	20	ppb max.
Vanadium (V)	10	ppb max.
Zinc (Zn)	20	ppb max.
Zirconium (Zr)	20	ppb max.
Particle/ml :		
0.5 $\mu\text{m}$ and greater	30	max.
1.0 $\mu\text{m}$ and greater	8	max.

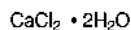
Product passed through 1 micron final filter.

Cat No.	Package	Size
VL1025-G500ML	Amber Glass	500 ML
VL1025-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
VL1025-G2.5L	Amber Glass	2.5 Litre
VL1025-G4L	Amber Glass	4 Litre



## CALCIUM CHLORIDE DIHYDRATE



CaCl <sub>2</sub> ·2H <sub>2</sub> O	FW. 147.01	Density =	1.85 g/cm <sup>3</sup>
CAS-No.	10035-04-8	Melting Point	176 °C
EC No.	233-140-8	EC-Index-No	017-013-00-2
GHS:	H319; P264, P280, P305 + P351 + P338, P337 + P313		



### Calcium Chloride Dihydrate, AR

Code AR1235

#### Specifications

(Meet A.C.S. Specifications)

Assay	99.0 - 105.0%
Identification	Passes test
pH (5% solution at 25 °C)	4.5 - 8.5
Insoluble matter	0.01% max.
Oxidizing substances (as NO <sub>3</sub> )	0.003% max.
Sulfate (SO <sub>4</sub> )	0.01% max.
Ammonium (NH <sub>4</sub> )	0.005% max.

Heavy metals (as Pb)	0.0005%	max.
Barium (Ba)	0.005%	max.
Iron (Fe)	0.001%	max.
Magnesium (Mg)	0.005%	max.
Potassium (K)	0.01%	max.
Sodium (Na)	0.02%	max.
Strontium (Sr)	0.1%	max.

Cat No.	Package	Size
AR1235-P500G	Plastic	500 G
AR1235-P5KG	Plastic	5 KG

Cat No.	Package	Size
AR1235-P25KG	Plastic	25 KG

## CALCIUM HYDROXIDE



Ca(OH) <sub>2</sub>	FW. 74.09	Density =	2.24 g/cm <sup>3</sup>
CAS-No.	1305-62-0	Melting Point	550 °C
EC No.	215-137-3		
GHS:	H315, H318, H335; P261, P264, P271, P280, P302 + P352, P304 + P340, P305 + P351 + P338, P310, P332 + P313, P362, P405		



### Calcium Hydroxide, AR

Code AR1318

#### Specifications

(Meet A.C.S. Specifications)

Appearance	White solid
Assay	95.0% min.
Calcium carbonate (as CaCO <sub>3</sub> )	3.0% max.
Insoluble in hydrochloric acid	0.03% max.
Chloride (Cl)	0.03% max.
Sulfur compounds (as SO <sub>4</sub> )	0.1% max.
Heavy Metals (as Pb)	0.003% max.

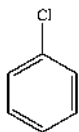
Iron (Fe)	0.05%	max.
Magnesium (Mg)	0.5%	max.
Potassium (K)	0.05%	max.
Sodium (Na)	0.05%	max.
Strontium (Sr)	0.05%	max.

Cat No.	Package	Size
AR1318-P500G	Plastic	500 G
AR1318-P5KG	Plastic	5 KG

Cat No.	Package	Size
AR1318-P25KG	Plastic	25 KG



## CHLOROBENZENE



C <sub>6</sub> H <sub>5</sub> Cl	FW. 112.56	Density 1 L =	1.110 kg.
CAS-No.	108-90-7	Melting Point	-45 °C
UN No.	1134	Boiling Point	132 °C
EC No.	203-628-5	EC-Index-No	602-033-00-1
Class:	3	Packaging Group:	III
GHS:	H226, H332, H411; P210, P233, P240, P241, P242, P243, P261, P271, P273, P280, P303 + P361 + P353, P304 + P340, P312, P370 + P378, P391, P403 + P235		



### Chlorobenzene, AR

Code AR1026

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Color (APHA)	30	max.
Water (by Coulometry)	0.05%	max.

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.002%	max.

Cat No.	Package	Size
AR1026-G500ML	Amber Glass	500 ML
AR1026-G1L	Amber Glass	1 Litre
AR1026-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1026-G4L	Amber Glass	4 Litre
AR1026-M25L	Metal	25 Litre
AR1026-M200L	Metal	200 Litre

### Chlorobenzene, RCI Premium

Code RP1026

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	30	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g)	0.0005	max.
Residue on Evaporation	0.002%	max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.

Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1026-G500ML	Amber Glass	500 ML
RP1026-G1L	Amber Glass	1 Litre
RP1026-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1026-G4L	Amber Glass	4 Litre
RP1026-M25L	Metal	25 Litre
RP1026-M200L	Metal	200 Litre



## 1-CHLOROBUTANE



CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> Cl	FW. 92.58	Density 1 L =	0.886 kg.
CAS-No.	109-69-3	Melting Point	-123 °C
UN No.	1127	Boiling Point	78.4 °C
EC No.	203-696-6	EC-Index-No	602-059-00-3
Class:	3	Packaging Group:	II
GHS:	H225; P210, P233, P240, P241, P242, P243, P280, P303 + P361 + P353, P370 + P378, P403 + P235		



### 1-Chlorobutane, AR

Code AR1031

#### Specifications

Assay (by GC.)	99.5%	min.	Acidity (mEq./g.)	0.0005	max.
Water (by Coulometry)	0.03%	max.	Residue on Evaporation	0.001%	max.

Cat No.	Package	Size
AR1031-G500ML	Amber Glass	500 ML
AR1026-G1L	Amber Glass	1 Litre
AR1026-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1026-G4L	Amber Glass	4 Litre
AR1026-M25L	Metal	25 Litre
AR1026-M200L	Metal	200 Litre

### 1-Chlorobutane, RCI Premium

Code RP1031

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.	Chromium (Cr)	0.01	ppm max.
Identity (IR)	Passes test		Cobalt (Co)	0.01	ppm max.
Water (by Coulometry)	0.03%	max.	Copper (Cu)	0.01	ppm max.
Acidity (mEq./g.)	0.0005	max.	Iron (Fe)	0.05	ppm max.
Residue on Evaporation	0.001%	max.	Lead (Pb)	0.05	ppm max.
Aluminium (Al)	0.2	ppm max.	Magnesium (Mg)	0.05	ppm max.
Barium (Ba)	0.05	ppm max.	Manganese (Mn)	0.01	ppm max.
Boron (B)	0.01	ppm max.	Nickel (Ni)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.	Tin (Sn)	0.05	ppm max.
Calcium (Ca)	0.2	ppm max.	Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1031-G500ML	Amber Glass	500 ML
RP1031-G1L	Amber Glass	1 Litre
RP1031-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1031-G4L	Amber Glass	4 Litre
RP1031-M25L	Metal	25 Litre
RP1031-M200L	Metal	200 Litre



## 1-Chlorobutane, HPLC

Code LC1031

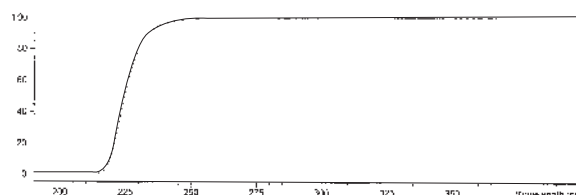
## Specifications

Assay (by GC.)	99.8%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
300 nm	99%	min.
280 nm	98%	min.
260 nm	95%	min.
240 nm	85%	min.
230 nm	65%	min.

Cat No.	Package	Size
LC1031-G500ML	Amber Glass	500 ML
LC1031-G1L	Amber Glass	1 Litre

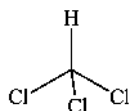
Fluorescence (as quinine)		
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1031-G2.5L	Amber Glass	2.5 Litre

## CHLOROFORM



CHCl<sub>3</sub>      FW. 119.38  
 CAS-No.      67-66-3  
 UN No.        1888  
 EC No.        200-663-8  
 Class:        6.1

Density 1 L =      1.479 kg.  
 Melting Point      -63 °C  
 Boiling Point        61 °C  
 EC-Index-No        602-006-00-4  
 Packaging Group:    III



GHS:            H302, H315, H319, H331, H351, H361d, H373; P201, P202, P261, P264, P270, P271, P280, P281, P301 + P312, P330, P302 + P352, P304 + P340, P305 + P351 + P338, P308 + P313, P311, P314, P332 + P313, P337 + P313, P362, P403 + P233, P405

## Chloroform, Pharma

Code BP1027E

## Specifications

(Meet ACS, Ph.Eur, BP, USP)

Assay (by GC.)	99.8%	min.
Identification (IR Spectrum)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Acid and Chloride	Passes test	
Acidity or alkalinity	Passes test	
Residue on Evaporation	0.001%	max.
Acetone and Aldehyde	0.005%	max.
Chloride (Cl)	1	ppm max.
Free Chlorine (Cl)	Passes test	

Cat No.	Package	Size
BP1027E-G500ML	Amber Glass	500 ML
BP1027E-G1L	Amber Glass	1 Litre
BP1027E-G2.5L	Amber Glass	2.5 Litre

Foreign chlorine compounds	Passes test	
Substances darkened by sulfuric acid	Passes test	
Suitability for use in dithizone tests	Passes test	
Lead (Pb)	0.05	ppm max.
Carbonyl compounds (as CO)	0.005%	max.
Dichloromethane (GC)	0.01%	max.
Tetrachloroethylene (GC.)	0.01%	max.
Tetrachloromethane (GC)	0.01%	max.
Trichloroethylene (GC.)	0.01%	max.

Stabilized with about 1% ethanol.

Cat No.	Package	Size
BP1027E-G4L	Amber Glass	4 Litre
BP1027E-M25L	Metal	25 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

### Chloroform, AR

Code AR1027E

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.8%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Acetone and Aldehyde	Passes test	
Acid and Chloride	Passes test	

Free Chlorine (Cl)	0.0005%	max.
Substances darkened by sulfuric acid	Passes test	
Suitability for use in dithizone tests	Passes test	
Lead (Pb)	0.05	ppm max.

Stabilized with about 1% ethanol.

Cat No.	Package	Size
AR1027E-G500ML	Amber Glass	500 ML
AR1027E-G1L	Amber Glass	1 Litre
AR1027E-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1027E-G4L	Amber Glass	4 Litre
AR1027E-M25L	Metal	25 Litre
AR1027E-M250KG	Metal	250 KG

### Chloroform, RCI Premium

Code RP1027E

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
Carbon tetrachloride (GC.)	0.01 %	max.
Dichloromethane (GC.)	0.01 %	max.
Ethanol (GC.)	0.6 - 1.0 %	
Related Substances (GC.)	0.7%	max.
Tetrachloroethylene (GC.)	0.01 %	max.
Trichloroethylene (GC.)	0.01 %	max.
Acid and Chloride	Passes test	
Aldehydes and ketones (as C <sub>3</sub> H <sub>6</sub> O)	0.001%	max.
Carbonyl compounds (as CO)	0.005%	max.
Chloride (Cl)	0.00002%	max.
Free acid (as HCl)	0.0002%	max.
Free Chlorine (Cl)	0.00003%	max.
Readily carbonizable substances	Passes test	

Suitability for use in dithizone tests	Passes test	
Aluminium (Al)	0.5	ppm max.
Barium (Ba)	0.1	ppm max.
Boron (B)	0.02	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Tin (Sn)	0.1	ppm max.
Zinc (Zn)	0.1	ppm max.

Stabilized with about 1% ethanol.

Cat No.	Package	Size
RP1027E-G500ML	Amber Glass	500 ML
RP1027E-G1L	Amber Glass	1 Litre
RP1027E-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1027E-G4L	Amber Glass	4 Litre
RP1027E-M20L	Metal	20 Litre
RP1027E-M250KG	Metal	250 KG





## Chloroform, UV-IR

Code IR1027E

### Specifications

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
280 nm	98%	min.

260 nm	90%	min.
250 nm	50%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Stabilized with about 1% ethanol.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1027E-G500ML	Amber Glass	500 ML
IR1027E-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1027E-G2.5L	Amber Glass	2.5 Litre
IR1027E-G4L	Amber Glass	4 Litre

## Chloroform, Anhydrous (50 ppm)

Code AH1029E

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.005%	max.
Acidity (mEq./g.)	0.0005	max.

Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.

Stabilized with about 1% ethanol.

Cat No.	Package	Size
AH1029E-G500ML	Amber Glass	500 ML
AH1029E-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1029E-G2.5L	Amber Glass	2.5 Litre
AH1029E-G4L	Amber Glass	4 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**Chloroform, Anhydrous (10 ppm) Code AH1028E**

**Specifications**

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.001%	max.
Acidity (mEq./g.)	0.0005	max.

Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.

Stabilized with about 1% ethanol.

Cat No.	Package	Size
AH1028E-G500ML	Amber Glass	500 ML
AH1028E-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1028E-G2.5L	Amber Glass	2.5 Litre
AH1028E-G4L	Amber Glass	4 Litre

**Chloroform, HPLC Code LC1027E**

**Specifications**

Assay (by GC.)	99.8%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Acetone and Aldehyde	Passes test	
Acid and Chloride	Passes test	
Free Chlorine (Cl)	0.0005%	max.
Substances darkened by sulfuric acid	Passes test	
Suitability for use in dithizone tests	Passes test	
Lead (Pb)	0.05	ppm max.
UV Transmission Levels (%T)	280 nm 99% min.	

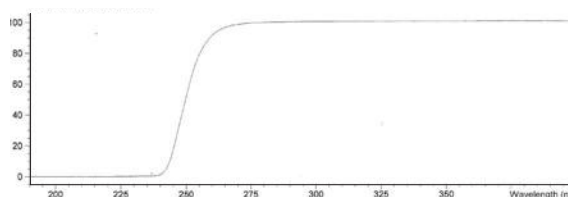
270 nm	98%	min.
260 nm	85%	min.
250 nm	50%	min.

Fluorescence (as quinine)

at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Stabilized with about 1% ethanol.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1027E-G500ML	Amber Glass	500 ML
LC1027E-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1027E-G2.5L	Amber Glass	2.5 Litre

**Chloroform, Pesticide Code PC1027E**

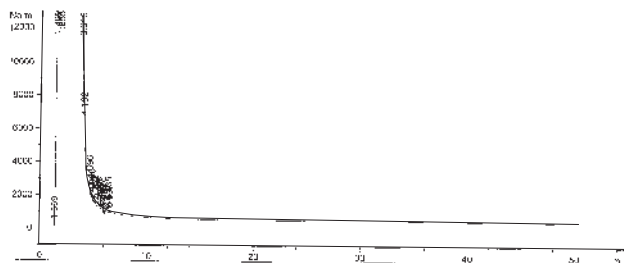
**Specifications**

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Free Chlorine (Cl)	0.0005%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	ng/L

Stabilized with about 1% ethanol.

Cat No.	Package	Size
PC1027EG500ML	Amber Glass	500 ML
PC1027E-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1027E-G2.5L	Amber Glass	2.5 Litre
PC1027E-G4L	Amber Glass	4 Litre



## Chloroform, Electropure

Code EP1027E

### Specifications

Assay (by GC.)	99.8%	min.
Identity	Corresponds to IR spectrum	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Carbonyl Compounds (as CO )	0.005%	max.
Free Chlorine (Cl)	0.0005%	max.
Chloride (Cl)	0.0001%	max.
Acetone and Aldehyde	Passes test	
Acid and Chloride	Passes test	
Substances darkened by sulfuric acid	Passes test	
Suitability for use in dithizone tests	Passes test	
Carbon tetrachloride (GC.)	0.01%	max.
Dichloromethane (GC.)	0.01%	max.
Tetrachloroethylene (GC.)	0.01%	max.
Trichloroethylene (GC.)	0.01%	max.
Aluminium (Al)	0.5	ppm max.
Arsenic (As)	0.02	ppm max.
Barium (Ba)	0.1	ppm max.
Boron (B)	0.02	ppm max.
Cadmium (Cd)	0.05	ppm max.

Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Gallium (Ga)	0.02	ppm max.
Germanium (Ge)	0.02	ppm max.
Gold (Au)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Potassium (K)	0.1	ppm max.
Silver (Ag)	0.02	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.05	ppm max.
Tin (Sn)	0.1	ppm max.
Zinc (Zn)	0.1	ppm max.

Stabilized with about 1% ethanol.

Cat No.	Package	Size
EP1027E-G500ML	Amber Glass	500 ML
EP1027E-G1L	Amber Glass	1 Litre
EP1027E-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
EP1027E-G4L	Amber Glass	4 Litre
EP1027E-M20L	Metal	20 Litre
EP1027E-M250KG	Metal	250 KG

## Chloroform, LV-GC

Code LV1005

### Specifications

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Free Chlorine (Cl)	0.0005%	max.

Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard)	10	pg/ml max.
Single impurity peak		
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Stabilized with about 1% ethanol.

Cat No.	Package	Size
LV1027E-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1027E-G2.5L	Amber Glass	2.5 Litre



## Chloroform, Peptide Synthesis

Code PS1027E

### Specifications

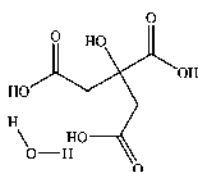
Assay (by GC.)	99.9%	min.	Alkalinity (mEq./g.)	0.0002	max.
Identity (IR)	Passes test		Residue on Evaporation	0.0003%	max.
Color (APHA)	10	max.	Free Amines	0.001%	max.
Water (by Coulometry)	0.01%	max.			
Acidity (mEq./g.)	0.0005	max.			

Stabilized with about 1% ethanol.

Cat No.	Package	Size
PS1027E-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PS1027E-G2.5L	Amber Glass	2.5 Litre

## CITRIC ACID MONOHYDRATE



$C_6H_8O_7 \cdot H_2O$	FW. 210.14	Density =	1.54 g/cm <sup>3</sup>
CAS-No.	5949-29-1	Melting Point	135-152 °C
EC No.	201-069-1		
GHS:	H319; P264, P280, P305 + P351 + P338, P337 + P313		



## Citric Acid Monohydrate, AR

Code AR1236

### Specifications

Assay	99.5%	min.	Phosphate (PO <sub>4</sub> )	0.001%	max.
Insoluble in water	0.005%	max.	Sulfate (SO <sub>4</sub> )	0.005%	max.
Residue on Ignition	0.02%	max.	Calcium (Ca)	0.005%	max.
Readily carbonisable substances	Passes test		Copper (Cu)	0.0005%	max.
Chloride (Cl)	0.0005%	max.	Iron (Fe)	0.0005%	max.
Oxalate	0.05%	max.	Lead (Pb)	0.0005%	max.

Cat No.	Package	Size
AR1236-P500G	Plastic	500 G
AR1236-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1236-P5KG	Plastic	5 KG
AR1236-P25KG	Plastic	25 KG

## CLEANING SOLUTION

CAS-No.	FW. 98.08	Density 1 L =	1.84 kg
UN No.	2240	EC-Index-No	016-020-00-8
EC No.	231-639-5	Packaging Group:	I
Class:	8		
GHS:	H272, H290, H301, H312, H314, H317, H330, H334, H340, H350, H361fD, H410; P201, P202, P210, P220, P234, P260, P264, P270, P271, P272, P273, P280, P284, P301 + P310, P301 + P330 + P331, P302 + P352, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P308 + P313, P312, P333 + P313, P342 + P311, P363, P390, P391, P403 + P233, P405, P406		



## Cleaning Solution S

Code GN1032

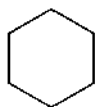
### Specifications

Sulfuric acid	≥ 92%	Potassium dichromate	≥ 1.3%
		Corrosive, Oxidizing	

Cat No.	Package	Size
GN1032-G500ML	Amber Glass	500 ML
GN1032-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
GN1032-G4L	Amber Glass	4 Litre

## CYCLOHEXANE



C <sub>6</sub> H <sub>12</sub>	FW. 84.16	Density 1 L =	0.779 kg
CAS-No.	110-82-7	Melting Point	6 °C
UN No.	1145	Boiling Point	81 °C
EC No.	203-806-2	EC-Index-No	601-017-00-1
Class:	3	Packaging Group:	II
GHS:	H225, H304, H315, H336, H410; P210, P233, P240, P241, P242, P243, P261, P264, P271, P273, P280, P301 + P310, P302 + P352, P303 + P361 + P353, P304 + P340, P312, P331, P332 + P313, P362, P370 + P378, P391, P403 + P235, P405		



### Cyclohexane, AR

Code AR1033

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Aromatics	0.05%	max.
Substances darkened by sulfuric acid	Passes test	

Cat No.	Package	Size
AR1033-G500ML	Amber Glass	500 ML
AR1033-G1L	Amber Glass	1 Litre
AR1033-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1033-G4L	Amber Glass	4 Litre
AR1033-M25L	Metal	25 Litre
AR1033-M200L	Metal	200 Litre

### Cyclohexane, RCI Premium

Code RP1033

#### Specifications

(Meet A.C.S. Specifications and USP/NF)

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.001%	max.
Cyclohexene (GC.)	0.05%	max.
Ethanol (GC.)	0.01%	max.
Aromatics	0.05%	max.
Readily carbonizable substances	Passes test	
Substances darkened by sulfuric acid	Passes test	
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.

Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1033-G500ML	Amber Glass	500 ML
RP1033-G1L	Amber Glass	1 Litre
RP1033-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1033-G4L	Amber Glass	4 Litre
RP1033-M25L	Metal	25 Litre
RP1033-M200L	Metal	200 Litre



## Cyclohexane, UV-IR

Code IR1033

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
250 nm	98%	min.

240 nm	90%	min.
230 nm	80%	min.
220 nm	50%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1033-G500ML	Amber Glass	500 ML
IR1033-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1033-G2.5L	Amber Glass	2.5 Litre
IR1033-G4L	Amber Glass	4 Litre

## Cyclohexane, HPLC

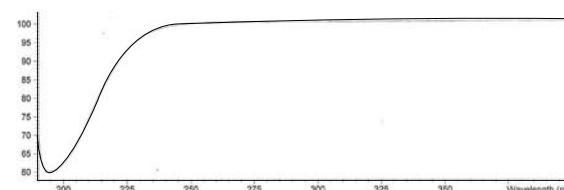
Code LC1033

### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	95%	min.
220 nm	80%	min.
210 nm	60%	min.

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1033-G500ML	Amber Glass	500 ML
LC1033-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1033-G2.5L	Amber Glass	2.5 Litre
LC1033-G4L	Amber Glass	4 Litre

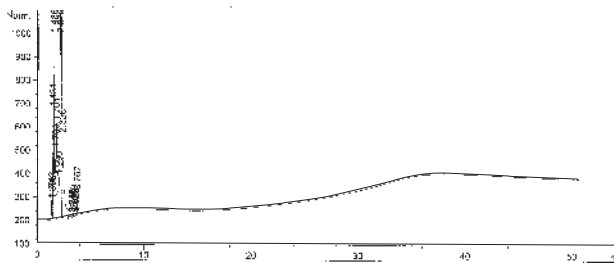


## Cyclohexane, Pesticide

Code PC1033

### Specifications

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	ng/L



Cat No.	Package	Size
PC1033-G500ML	Amber Glass	500 ML
PC1033-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1033-G2.5L	Amber Glass	2.5 Litre
PC1033-G4L	Amber Glass	4 Litre

## Cyclohexane, Extropure

Code XP1033

### Specifications

Assay (by GC.)	99.8%	min.
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.001%	max.
Cyclohexene (GC.)	0.05%	max.
Ethanol (GC.)	0.01%	max.
Chloride (Cl)	0.2	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.
Aluminium (Al)	50	ppb max.
Arsenic (As)	20	ppb max.
Barium (Ba)	10	ppb max.
Boron (B)	10	ppb max.
Cadmium (Cd)	20	ppb max.
Calcium (Ca)	50	ppb max.
Chromium (Cr)	10	ppb max.
Cobalt (Co)	10	ppb max.

Copper (Cu)	10	ppb max.
Gallium (Ga)	20	ppb max.
Germanium (Ge)	20	ppb max.
Gold (Au)	20	ppb max.
Iron (Fe)	50	ppb max.
Lead (Pb)	20	ppb max.
Lithium (Li)	20	ppb max.
Magnesium (Mg)	20	ppb max.
Manganese (Mn)	20	ppb max.
Nickel (Ni)	20	ppb max.
Potassium (K)	50	ppb max.
Silver (Ag)	20	ppb max.
Sodium (Na)	50	ppb max.
Strontium (Sr)	20	ppb max.
Tin (Sn)	20	ppb max.
Zinc (Zn)	50	ppb max.
Silicone oil	Free	

Cat No.	Package	Size
XP1033-G500ML	Amber Glass	500 ML
XP1033-G1L	Amber Glass	1 Litre
XP1033-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
XP1033-G4L	Amber Glass	4 Litre
XP1033-M25L	Metal	25 Litre
XP1033-M200L	Metal	200 Litre





A  
B  
**C**  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Cyclohexane, LV-GC

Code LV1033

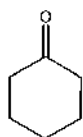
### Specifications

Assay (by GC.)	99.5%	min.	Residue on Evaporation	0.0003%	max.
Identity (IR)	Passes test		Substances reducing permanganate	Passes test	
Color (APHA)	10	max.	ECD (as lindane standard)	10	pg/ml max.
Water (by Coulometry)	0.01%	max.	Single impurity peak		
Acidity (mEq./g.)	0.0005	max.	Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1033-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1033-G2.5L	Amber Glass	2.5 Litre

## CYCLOHEXANONE



C<sub>6</sub>H<sub>10</sub>O  
CAS-No. 108-94-1  
UN No. 1915  
EC No. 203-631-1  
Class: 3

Density 1 L = 0.945 kg  
Melting Point -31 °C  
Boiling Point 156.6 °C  
EC-Index-No 606-010-00-7  
Packaging Group: III



GHS: H226,H302 + H312 + H332,H315,H318; P210, P233, P240, P241, P242, P243, P261, P264, P270, P271, P280, P301 + P312, P302 + P352, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P330, P332 + P313, P362, P363, P370 + P378, P403 + P235

## Cyclohexanone, AR

Code AR1034

### Specifications

Assay (by GC.)	99.0%	min.	Acidity (mEq./g.)	0.0005	max.
Water (by Coulometry)	0.1%	max.	Residue on Evaporation	0.001%	max.

Cat No.	Package	Size
AR1034-G500ML	Amber Glass	500 ML
AR1034-G1L	Amber Glass	1 Litre
AR1034-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1034-G4L	Amber Glass	4 Litre
AR1034-M25L	Metal	25 Litre
AR1034-M200L	Metal	200 Litre

## Cyclohexanone, RCI Premium

Code RP1034

### Specifications

Assay (by GC.)	99.0%	min.	Cobalt (Co)	0.01	ppm max.
Water (by Coulometry)	0.1%	max.	Copper (Cu)	0.01	ppm max.
Acidity (mEq./g.)	0.0005	max.	Iron (Fe)	0.05	ppm max.
Residue on Evaporation	0.001%	max.	Lead (Pb)	0.05	ppm max.
Aluminium (Al)	0.2	ppm max.	Magnesium (Mg)	0.05	ppm max.
Barium (Ba)	0.05	ppm max.	Manganese (Mn)	0.01	ppm max.
Boron (B)	0.01	ppm max.	Nickel (Ni)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.	Tin (Sn)	0.05	ppm max.
Calcium (Ca)	0.2	ppm max.	Zinc (Zn)	0.05	ppm max.
Chromium (Cr)	0.01	ppm max.			

Cat No.	Package	Size
RP1034-G500ML	Amber Glass	500 ML
RP1034-G1L	Amber Glass	1 Litre
RP1034-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1034-G4L	Amber Glass	4 Litre
RP1034-M25L	Metal	25 Litre
RP1034-M200L	Metal	200 Litre



## CYCLOPENTANE



C <sub>5</sub> H <sub>10</sub>	FW. 70.14	Density 1 L =	0.749 kg
CAS-No.	287-92-3	Melting Point	-93 °C
UN No.	1146	Boiling Point	49 °C
EC No.	206-016-6	EC-Index-No	601-030-00-2
Class:	3	Packaging Group:	II
GHS:	H225,H304,H336,H412; P210, P233, P240, P241, P242 , P243, P261, P271, P273, P280, P301 + P310, P303 + P361 + P353, P304 + P340, P312, P331, P370 + P378, P403 + P235, P405		



### Cyclopentane 95%, AR

Code AR1037

#### Specifications

Assay (by GC.)	95.0%	min.	Residue on Evaporation	0.001%	max.
Water (by Coulometry)	0.02%	max.	Aromatics	0.05%	max.
Acidity (mEq./g.)	0.0005	max.			

Cat No.	Package	Size
AR1037-G500ML	Amber Glass	500 ML
AR1037-G1L	Amber Glass	1 Litre
AR1037-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1037-G4L	Amber Glass	4 Litre
AR1037-M25L	Metal	25 Litre
AR1037-M200L	Metal	200 Litre

### Cyclopentane 99%, AR

Code AR1035

#### Specifications

Assay (by GC.)	99.0%	min.	Residue on Evaporation	0.001%	max.
Water (by Coulometry)	0.02%	max.	Aromatics	0.05%	max.
Acidity (mEq./g.)	0.0005	max.			

Cat No.	Package	Size
AR1035-G500ML	Amber Glass	500 ML
AR1035-G1L	Amber Glass	1 Litre
AR1035-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1035-G4L	Amber Glass	4 Litre
AR1035-M25L	Metal	25 Litre
AR1035-M200L	Metal	200 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

### Cyclopentane 99%, RCI Premium

Code RP1035

#### Specifications

Assay (by GC.)	99.0%	min.
Identity (IR)	Passes test	
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Aromatics	0.05%	max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.

Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1035-G500ML	Amber Glass	500 ML
RP1035-G1L	Amber Glass	1 Litre
RP1035-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1035-G4L	Amber Glass	4 Litre
RP1035-M25L	Metal	25 Litre
RP1035-M200L	Metal	200 Litre

### Cyclopentane 99%, UV-IR

Code IR1035

#### Specifications

Assay (by GC.)	99.0%	min.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
250 nm	98%	min.
240 nm	95%	min.

220 nm	80%	min.
200 nm	30%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

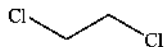
Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1035-G500ML	Amber Glass	500 ML
IR1035-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1035-G2.5L	Amber Glass	2.5 Litre
IR1035-G4L	Amber Glass	4 Litre



## 1,2-DICHLOROETHANE



C <sub>2</sub> H <sub>4</sub> Cl <sub>2</sub>	FW. 98.96	Density 1 L =	1.250 Kg.
CAS-No.	107-06-2	Melting Point	-35 °C
UN No.	1184	Boiling Point	83.5 °C
EC No.	203-458-1	EC-Index-No	602-012-00-7
Class:	3 (6.1)	Packaging Group:	II
GHS:	H225, H302, H315, H319, H335, H350; P201, P202, P210, P233, P240, P241, P242, P243, P261, P264, P270, P271, P280, P281, P301 + P312, P302 + P352, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P308 + P313, P312, P330, P332 + P313, P337 + P313, P362, P370 + P378, P403 + P235, P405		



### 1,2-Dichloroethane, AR

Code AR1038

#### Specifications

Assay (by GC.)	99.8%	min.	Acidity (mEq./g.)	0.0005	max.
Water (by Coulometry)	0.05%	max.	Residue on Evaporation	0.001%	max.

Cat No.	Package	Size
AR1038-G500ML	Amber Glass	500 ML
AR1038-G1L	Amber Glass	1 Litre
AR1038-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1038-G4L	Amber Glass	4 Litre
AR1038-M20L	Metal	20 Litre
AR1038-M200L	Metal	200 Litre

### 1,2-Dichloroethane, RCI Premium

Code RP1038

#### Specifications

Assay (by GC.)	99.8%	min.	Cobalt (Co)	0.01	ppm max.
Water (by Coulometry)	0.05%	max.	Copper (Cu)	0.01	ppm max.
Acidity (mEq./g.)	0.0005	max.	Iron (Fe)	0.05	ppm max.
Residue on Evaporation	0.001%	max.	Lead (Pb)	0.05	ppm max.
Aluminium (Al)	0.2	ppm max.	Magnesium (Mg)	0.05	ppm max.
Barium (Ba)	0.05	ppm max.	Manganese (Mn)	0.01	ppm max.
Boron (B)	0.01	ppm max.	Nickel (Ni)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.	Tin (Sn)	0.05	ppm max.
Calcium (Ca)	0.2	ppm max.	Zinc (Zn)	0.05	ppm max.
Chromium (Cr)	0.01	ppm max.			

Cat No.	Package	Size
RP1038-G500ML	Amber Glass	500 ML
RP1038-G1L	Amber Glass	1 Litre
RP1038-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1038-G4L	Amber Glass	4 Litre
RP1038-M20L	Metal	20 Litre
RP1038-M200L	Metal	200 Litre



1,2-Dichloroethane, UV-IR

Code IR1038

Specifications

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
260 nm	98%	min.

250 nm	90%	min.
240 nm	80%	min.
230 nm	30%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1038-G500ML	Amber Glass	500 ML
IR1038-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1038-G2.5L	Amber Glass	2.5 Litre
IR1038-G4L	Amber Glass	4 Litre

1,2-Dichloroethane, HPLC

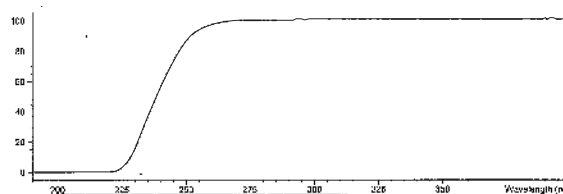
Code LC1038

Specifications

Assay (by GC.)	99.8%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
300 nm	99%	min.
280 nm	98%	min.
260 nm	90%	min.
250 nm	50%	min.

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

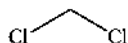


Cat No.	Package	Size
LC1038-G500ML	Amber Glass	500 ML
LC1038-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
LC1038-G4L	Amber Glass	4 Litre



## DICHLOROMETHANE



CH <sub>2</sub> Cl <sub>2</sub>	FW. 84.93	Density 1 L =	1.330 Kg.
CAS-No.	75-09-2	Melting Point	-95 °C
UN No.	1593	Boiling Point	40 °C
EC No.	200-838-9	EC-Index-No	602-004-00-3
Class:	6.1	Packaging Group:	III
GHS:	H315, H319, H335, H336, H351, H373; P201, P202, P260, P261, P264, P271, P280, P281, P302 + P352, P304 + P340, P305 + P351 + P338, P308 + P313, P312, P314, P332 + P313, P337 + P313, P362, P403 + P233, P405		



### Dichloromethane, Pharma

Code BP1040A

#### Specifications

(Conforms to BP/EP/USP/NF)

Assay (by GC.)	99.8%	min.
Identification (IR)	Passes test	
Appearance	Clear	
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.001%	max.
Volatile impurities	0.2%	max.
Free Chlorine (Cl)	0.0002%	max.

Hydrogen Chloride	0.001%	max.
Solubility in water	Passes test	
Heavy metals (as Pb)	1.00%	ppm max.
Relative density @ 20 °C	1.320-1.332	
Relative density @ 25 °C	1.318-1.322	
Refractive Index @ 20 °C	1.423-1.425	

Stabilized with about 50 ppm amylene.

Cat No.	Package	Size
BP1040A-M20L	Metal	20 Litre

### Dichloromethane, AR

Code AR1040A

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.8%	min.
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0003	max.

Residue on Evaporation	0.001%	max.
Free Chlorine (Cl)	0.0002%	max.

Stabilized with about 50 ppm amylene.

Cat No.	Package	Size
AR1040A-G500ML	Amber Glass	500 ML
AR1040A-G1L	Amber Glass	1 Litre
AR1040A-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1040A-G4L	Amber Glass	4 Litre
AR1040A-M25L	Metal	25 Litre
AR1040A-M200L	Metal	200 Litre



### Dichloromethane, RCI Premium

Code RP1040A

#### Specifications

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.001%	max.
Carbon tetrachloride (GC.)	0.005%	max.
Chloroform (GC.)	0.005%	max.
Ethanol (GC.)	0.02%	max.
Methanol (GC.)	0.1%	max.
Chloride (Cl)	0.0001%	max.
Free Chlorine (Cl)	0.00002%	max.
Matter discoloured by H <sub>2</sub> SO <sub>4</sub> (APHA)	100	max.
Fluorescence (as quinine)		
at 365 nm	2.0	ppb max.
Aluminium (Al)	0.2	ppm max.

Cat No.	Package	Size
RP1040A-G500ML	Amber Glass	500 ML
RP1040A-G1L	Amber Glass	1 Litre
RP1040A-G2.5L	Amber Glass	2.5 Litre

#### (Meet A.C.S. Specifications)

Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Stabilized with about 50 ppm amylene.

Cat No.	Package	Size
RP1040A-G4L	Amber Glass	4 Litre
RP1040A-M25L	Metal	25 Litre
RP1040A-M200L	Metal	200 Litre

### Dichloromethane, UV-IR

Code IR1040A

#### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0003	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
260 nm	98%	min.

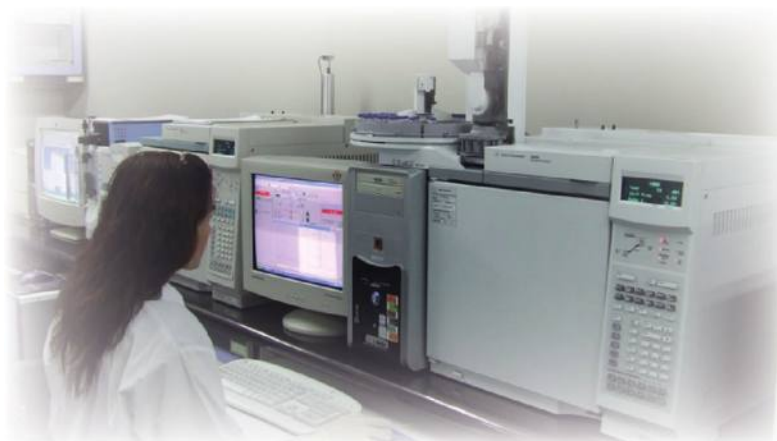
Cat No.	Package	Size
IR1040A-G500ML	Amber Glass	500 ML
IR1040A-G1L	Amber Glass	1 Litre

250 nm	90%	min.
240 nm	80%	min.
230 nm	5%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Stabilized with about 50 ppm amylene.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1040A-G2.5L	Amber Glass	2.5 Litre
IR1040A-G4L	Amber Glass	4 Litre



Dichloromethane, Anhydrous (50 ppm)

Code AH1043A

Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.005%	max.
Acidity (mEq./g.)	0.0003	max.

Residue on Evaporation	0.0003%	max.
Free Chlorine (Cl)	0.0002%	max.

Stabilized with about 50 ppm amylene.

Cat No.	Package	Size
AH1043A-G500ML	Amber Glass	500 ML
AH1043A-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1043A-G2.5L	Amber Glass	2.5 Litre
AH1043A-G4L	Amber Glass	4 Litre

Dichloromethane, Anhydrous (10 ppm)

Code AH1042A

Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.001%	max.
Acidity (mEq./g.)	0.0003	max.

Residue on Evaporation	0.0003%	max.
Free Chlorine (Cl)	0.0002%	max.

Stabilized with about 50 ppm amylene.

Cat No.	Package	Size
AH1042A-G100ML	Amber Glass	100 ML
AH1042A-G500ML	Amber Glass	500 ML
AH1042A-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1042A-G2.5L	Amber Glass	2.5 Litre
AH1042A-G4L	Amber Glass	4 Litre

Dichloromethane, HPLC

Code LC1040A

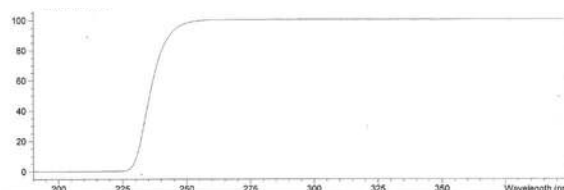
Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0003	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Free Chlorine (Cl)	0.0002%	max.
UV Transmission Levels (%T)		
260 nm	99%	min.
250 nm	98%	min.
240 nm	75%	min.
235 nm	40%	min.

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Stabilized with about 50 ppm amylene.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1040A-G500ML	Amber Glass	500 ML
LC1040A-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1040A-G2.5L	Amber Glass	2.5 Litre
LC1040A-G4L	Amber Glass	4 Litre



**Dichloromethane, HPLC Plus**

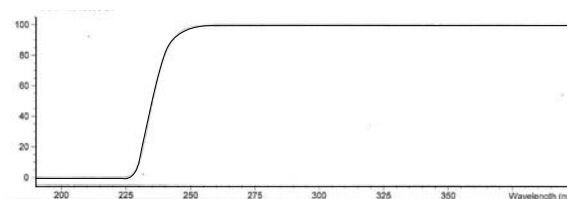
Code LC1041A

**Specifications**

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0003	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Free Chlorine (Cl)	0.0002%	max.
UV Transmission Levels (%T)		
260 nm	99%	min.
250 nm	98%	min.
240 nm	75%	min.
235 nm	40%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.

at 365 nm	1	ppb max.
Silicone oil	Free	
DOP	Free	
Amide	Free	

Stabilized with about 50 ppm amylene.  
Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1041A-G500ML	Amber Glass	500 ML
LC1041A-G1L	Amber Glass	1 Litre

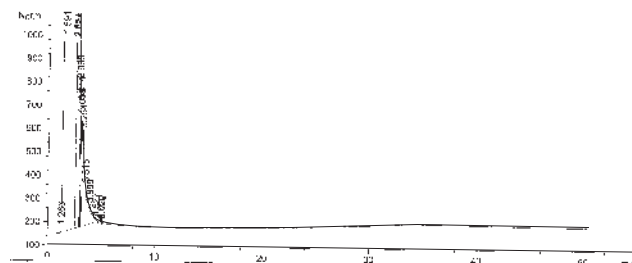
Cat No.	Package	Size
LC1041A-G2.5L	Amber Glass	2.5 Litre
LC1041A-G4L	Amber Glass	4 Litre

**Dichloromethane, Pesticide**

Code PC1040A

**Specifications**

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0003	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
ECD (as lindane standard) Single impurity peak	10	ng/L



Stabilized with about 50 ppm amylene.

Cat No.	Package	Size
PC1040A-G500ML	Amber Glass	500 ML
PC1040A-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1040A-G2.5L	Amber Glass	2.5 Litre
PC1040A-G4L	Amber Glass	4 Litre





## Dichloromethane, Electropure

Code EP1040A

### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.0005%	max.
Free Chlorine (Cl)	0.0002%	max.
Aluminium (Al)	0.5	ppm max.
Arsenic (As)	0.02	ppm max.
Barium (Ba)	0.1	ppm max.
Boron (B)	0.02	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Gallium (Ga)	0.02	ppm max.

Cat No.	Package	Size
EP1040A-G500ML	Amber Glass	500 ML
EP1040A-G1L	Amber Glass	1 Litre
EP1040A-G2.5L	Amber Glass	2.5 Litre

Germanium (Ge)	0.02	ppm max.
Gold (Au)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Potassium (K)	0.1	ppm max.
Silver (Ag)	0.02	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.05	ppm max.
Tin (Sn)	0.1	ppm max.
Zinc (Zn)	0.1	ppm max.

Stabilized with about 50 ppm amylene.

Cat No.	Package	Size
EP1040A-G4L	Amber Glass	4 Litre
EP1040A-M20L	Metal	20 Litre
EP1040A-M200L	Metal	200 Litre

## Dichloromethane, Extropure

Code XP1040A

### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.0005%	max.
Free Chlorine (Cl)	0.0002%	max.
Aluminium (Al)	0.5	ppm max.
Arsenic (As)	0.02	ppm max.
Barium (Ba)	0.1	ppm max.
Boron (B)	0.02	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Gallium (Ga)	0.02	ppm max.
Germanium (Ge)	0.02	ppm max.

Cat No.	Package	Size
XP1040A-G500ML	Amber Glass	500 ML
XP1040A-G1L	Amber Glass	1 Litre
XP1040A-G2.5L	Amber Glass	2.5 Litre

Gold (Au)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Potassium (K)	0.1	ppm max.
Silver (Ag)	0.02	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.05	ppm max.
Tin (Sn)	0.1	ppm max.
Zinc (Zn)	0.1	ppm max.
Silicone oil	Free	
DOP	Free	
Amide	Free	

Stabilized with about 50 ppm amylene.

Cat No.	Package	Size
XP1040A-G4L	Amber Glass	4 Litre
XP1040A-M25L	Metal	25 Litre
XP1040A-M200L	Metal	200 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

Dichloromethane, SDF

Code XP1323A

Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.8%	min.
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0003	max.

Residue on Evaporation	0.001%	max.
Free Chlorine (Cl)	0.0002%	max.
Phthalate	Free	

Stabilized with about 50 ppm amylene.

Cat No.	Package	Size
XP1323A-G500ML	Amber Glass	500 ML
XP1323A-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
XP1323A-G2.5L	Amber Glass	2.5 Litre
XP1323A-G4L	Amber Glass	4 Litre

Dichloromethane, LV-GC

Code LV1040A

Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0003	max.
Alkalinity (mEq./g.)	0.0002	max.

Residue on Evaporation	0.0003%	max.
ECD (as lindane standard)	10	pg/ml max.
Single impurity peak		
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Stabilized with about 50 ppm amylene.

Cat No.	Package	Size
LV1040A-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1040A-G2.5L	Amber Glass	2.5 Litre

Dichloromethane, Peptide Synthesis

Code PS1040A

Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0003	max.

Residue on Evaporation	0.0003%	max.
Free Chlorine (Cl)	0.0002%	max.
Free Amines	0.001%	max.

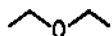
Stabilized with about 50 ppm amylene.

Cat No.	Package	Size
PS1040A-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PS1040A-G2.5L	Amber Glass	2.5 Litre



## DIETHYL ETHER



(C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> O	FW. 74.12	Density 1 L =	0.710 Kg.
CAS-No.	60-29-7	Melting Point	-116.3 °C
UN No.	1155	Boiling Point	34.6 °C
EC No.	200-467-2	EC-Index-No	603-022-00-4
Class:	3	Packaging Group:	I
GHS:	H224, H302, H336, EUH019, EUH066; P210, P233, P240, P241, P242, P243, P261, P264, P270, P271, P280, P301 + P312, P303 + P361 + P353, P304 + P340, P330, P370 + P378, P403 + P235, P405		



### Diethyl ether, AR

Code AR1044B

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.001%	max.

Carbonyl (as HCHO)	0.001%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	1	ppm max.

Stabilized with about 5 ppm BHT.

Cat No.	Package	Size
AR1044B-G500ML	Amber Glass	500 ML
AR1044B-G1L	Amber Glass	1 Litre
AR1044B-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1044B-G4L	Amber Glass	4 Litre
AR1044B-M25L	Metal	25 Litre
AR1044B-M200L	Metal	200 Litre

### Diethyl ether, AR

Code AR1046E

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.001%	max.

Carbonyl (as HCHO)	0.001%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	1	ppm max.

Stabilized with about 1% ethanol.

Cat No.	Package	Size
AR1046E-G500ML	Amber Glass	500 ML
AR1046E-G1L	Amber Glass	1 Litre
AR1046E-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1046E-G4L	Amber Glass	4 Litre
AR1046E-M25L	Metal	25 Litre
AR1046E-M200L	Metal	200 Litre

### Diethyl ether, AR

Code AR1047E

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.001%	max.

Carbonyl (as HCHO)	0.001%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	1	ppm max.

Stabilized with about 2% ethanol.

Cat No.	Package	Size
AR1047E-G500ML	Amber Glass	500 ML
AR1047E-G1L	Amber Glass	1 Litre
AR1047E-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1047E-G4L	Amber Glass	4 Litre
AR1047E-M25L	Metal	25 Litre
AR1047E-M200L	Metal	200 Litre

## Diethyl ether, RCI Premium

Code RP1044B

### Specifications

Assay (by GC.)	99.7%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Acetone (GC.)	0.005%	max.
Carbon tetrachloride (GC.)	0.005%	max.
Ethanol (GC.)	0.02%	max.
Methanol (GC.)	0.02%	max.
Carbonyl (as HCHO)	0.001%	max.
Carbonyl (as CO)	0.001%	max.
Chloride (Cl)	0.00003%	max.
Sulfate (SO <sub>4</sub> )	0.00003%	max.
Matter discoloured by H <sub>2</sub> SO <sub>4</sub> (APHA)	10	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.15	ppm max.

Cat No.	Package	Size
RP1044B-G500ML	Amber Glass	500 ML
RP1044B-G1L	Amber Glass	1 Litre
RP1044B-G2.5L	Amber Glass	2.5 Litre

### (Meet A.C.S. Specifications)

Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Stabilized with about 5 ppm BHT.

Cat No.	Package	Size
RP1044B-G4L	Amber Glass	4 Litre
RP1044B-M25L	Metal	25 Litre
RP1044B-M200L	Metal	200 Litre

## Diethyl ether, RCI Premium

Code RP1046E

### Specifications

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Acetone (GC.)	0.005%	max.
Carbon tetrachloride (GC.)	0.005%	max.
Methanol (GC.)	0.02%	max.
Carbonyl (as HCHO)	0.001%	max.
Chloride (Cl)	0.00003%	max.
Sulfate (SO <sub>4</sub> )	0.00003%	max.
Matter discoloured by H <sub>2</sub> SO <sub>4</sub> (APHA)	10	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.15	ppm max.
Aluminium (Al)	0.2	ppm max.

Cat No.	Package	Size
RP1046E-G500ML	Amber Glass	500 ML
RP1046E-G1L	Amber Glass	1 Litre
RP1046E-G2.5L	Amber Glass	2.5 Litre

### (Meet A.C.S. Specifications)

Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Stabilized with about 1% ethanol.

Cat No.	Package	Size
RP1046E-G4L	Amber Glass	4 Litre
RP1046E-M25L	Metal	25 Litre
RP1046E-M200L	Metal	200 Litre

## Diethyl ether, RCI Premium

Code RP1047E

### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Acetone (GC.)	0.005%	max.
Carbon tetrachloride (GC.)	0.005%	max.
Methanol (GC.)	0.02%	max.
Carbonyl (as HCHO)	0.001%	max.
Chloride (Cl)	0.00003%	max.
Sulfate (SO <sub>4</sub> )	0.00003%	max.
Matter discoloured by H <sub>2</sub> SO <sub>4</sub> (APHA)	10	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.15	ppm max.
Aluminium (Al)	0.2	ppm max.

Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Stabilized with about 2% ethanol.

Cat No.	Package	Size
RP1047E-G500ML	Amber Glass	500 ML
RP1047E-G1L	Amber Glass	1 Litre
RP1047E-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1047E-G4L	Amber Glass	4 Litre
RP1047E-M25L	Metal	25 Litre
RP1047E-M200L	Metal	200 Litre

## Diethyl ether, UV-IR

Code IR1044B

### Specifications

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	5	ppm max.
UV Transmission Levels (%T)		
280 nm	98%	min.
270 nm	95%	min.

260 nm	90%	min.
250 nm	75%	min.
230 nm	40%	min.
Fluorescence (as quinine)		
at 254 nm	2	ppb max.
at 365 nm	2	ppb max.

Stabilized with about 5 ppm BHT.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1044B-G500ML	Amber Glass	500 ML
IR1044B-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1044B-G2.5L	Amber Glass	2.5 Litre
IR1044B-G4L	Amber Glass	4 Litre

## Diethyl ether, Anhydrous (50 ppm)

Code AH1045B

### Specifications

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.005%	max.

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.

Stabilized with about 5 ppm BHT.

Cat No.	Package	Size
AH1045B-G500ML	Amber Glass	500 ML
AH1045B-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1045B-G2.5L	Amber Glass	2.5 Litre
AH1045B-G4L	Amber Glass	4 Litre

Diethyl ether, HPLC

Code LC1046E

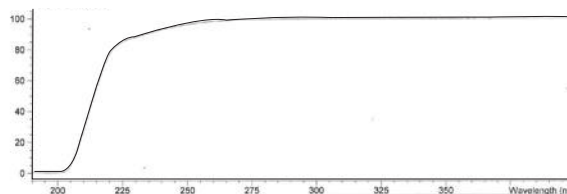
Specifications

Assay (by GC.)	99.5%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	5	ppm max.
UV Transmission Levels (%T)		
280 nm	99%	min.
260 nm	95%	min.
250 nm	90%	min.
240 nm	80%	min.
230 nm	70%	min.

Cat No.	Package	Size
LC1046E-G500ML	Amber Glass	500 ML
LC1046E-G1L	Amber Glass	1 Litre

Fluorescence (as quinine)		
at 365 nm	1	ppb max.

Stabilized with about 1% ethanol.  
Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1046E-G2.5L	Amber Glass	2.5 Litre
LC1046E-G4L	Amber Glass	4 Litre

Diethyl ether, HPLC

Code LC1044B

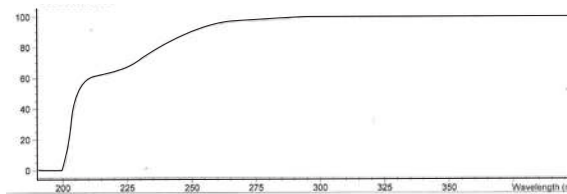
Specifications

Assay (by GC.)	99.5%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	5	ppm max.
UV Transmission Levels (%T)		
300 nm	99%	min.
280 nm	95%	min.
260 nm	90%	min.
250 nm	80%	min.
230 nm	50%	min.

Cat No.	Package	Size
LC1044B-G500ML	Amber Glass	500 ML
LC1044B-G1L	Amber Glass	1 Litre

Fluorescence (as quinine)		
at 365 nm	1	ppb max.

Stabilized with about 5 ppm BHT.  
Product passed through 0.2 micron final filter.



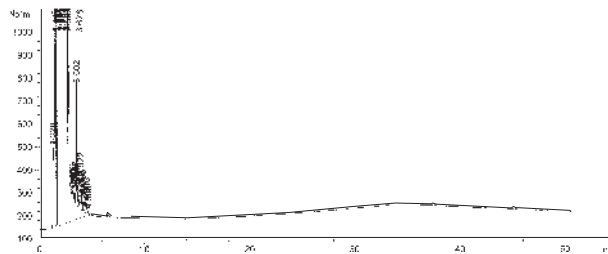
Cat No.	Package	Size
LC1044B-G2.5L	Amber Glass	2.5 Litre
LC1044B-G4L	Amber Glass	4 Litre

## Diethyl ether, Pesticide

Code PC1046E

### Specifications

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	5	ppm max.
ECD (as lindane standard) Single impurity peak	10	ng/L



Stabilized with about 1% ethanol.

Cat No.	Package	Size
PC1046E-G500ML	Amber Glass	500 ML
PC1046E-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1046E-G2.5L	Amber Glass	2.5 Litre
PC1046E-G4L	Amber Glass	4 Litre

## Diethyl Ether, Electropure

Code EP1047E

### Specifications

Assay (by GC.)	99.5%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.1%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	5	ppm max.
Heavy metals (as Pb)	200	ppb max.
Aluminium (Al)	50	ppb max.
Arsenic and Antimony (as As)	10	ppb max.
Barium (Ba)	20	ppb max.
Boron (B)	10	ppb max.
Cadmium (Cd)	20	ppb max.
Calcium (Ca)	50	ppb max.
Chromium (Cr)	20	ppb max.
Cobalt (Co)	20	ppb max.
Copper (Cu)	10	ppb max.
Gallium (Ga)	30	ppb max.
Germanium (Ge)	30	ppb max.

Gold (Au)	20	ppb max.
Iron (Fe)	50	ppb max.
Lead (Pb)	20	ppb max.
Lithium (Li)	50	ppb max.
Magnesium (Mg)	20	ppb max.
Manganese (Mn)	20	ppb max.
Nickel (Ni)	10	ppb max.
Potassium (K)	100	ppb max.
Silver (Ag)	50	ppb max.
Sodium (Na)	100	ppb max.
Strontium (Sr)	20	ppb max.
Tin (Sn)	100	ppb max.
Titanium (Ti)	20	ppb max.
Zinc (Zn)	50	ppb max.

Stabilized with about 2% ethanol.

Cat No.	Package	Size
EP1047E-G500ML	Amber Glass	500 ML
EP1047E-G1L	Amber Glass	1 Litre
EP1047E-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
EP1047E-G4L	Amber Glass	4 Litre
EP1047E-M20L	Metal	20 Litre
EP1047E-M200L	Metal	200 Litre

## Diethyl Ether, LV-GC

Code LV1046E

### Specifications

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.

Peroxide (as H <sub>2</sub> O <sub>2</sub> )	5	ppm max.
ECD (as lindane standard)	10	pg/ml max.
Single impurity peak		
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Stabilized with about 1% ethanol.

Cat No.	Package	Size
LV1046E-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1046E-G2.5L	Amber Glass	2.5 Litre

## Diethyl Ether, Peptide Synthesis

Code PS1044B

### Specifications

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.

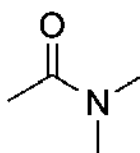
Residue on Evaporation	0.0005%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.0005%	max.
Free Amines	0.001%	max.

Stabilized with about 5 ppm BHT.

Cat No.	Package	Size
PS1044B-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PS1044B-G2.5L	Amber Glass	2.5 Litre

## DIMETHYLACETAMIDE



CH<sub>3</sub>C(=O)N(CH<sub>3</sub>)<sub>2</sub>  
 CAS-No. 127-19-5

EC No. 204-826-4

GHS: H312 + H332, H319, H360D; P201, P202, P261, P264, P271, P280, P281, P302 + P352, P304 + P340, P305 + P351 + P338, P308 + P313, P312, P337 + P313, P363, P405

Density 1 L = 0.940 Kg.  
 Melting Point -20 °C  
 Boiling Point 166 °C  
 EC-Index-No 616-011-00-4



## Dimethylacetamide, AR

Code AR1050

### Specifications

Assay (by GC.)	99.5%	min.
Water (by Coulometry)	0.07%	max.

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.005%	max.

Cat No.	Package	Size
AR1050-G500ML	Amber Glass	500 ML
AR1050-G1L	Amber Glass	1 Litre
AR1050-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1050-G4L	Amber Glass	4 Litre
AR1050-M25L	Metal	25 Litre
AR1050-M200L	Metal	200 Litre

## Dimethylacetamide, RCI Premium

Code RP1050

### Specifications

Assay (by GC.)	99.7%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.07%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.

Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1050-G500ML	Amber Glass	500 ML
RP1050-G1L	Amber Glass	1 Litre
RP1050-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1050-G4L	Amber Glass	4 Litre
RP1050-M25L	Metal	25 Litre
RP1050-M200L	Metal	200 Litre



## Dimethylacetamide, For GC Analysis

Code GC1050

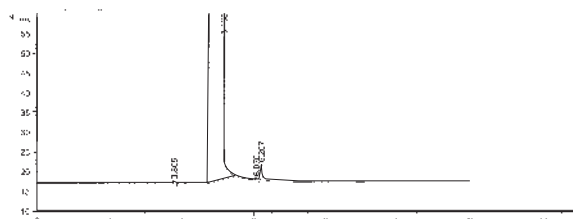
### Specifications

Description	Colorless, hygroscopic liquid.	
Miscibility	Miscible with water and organic solvents	
Assay (by GC.)	99.8%	min.
Weight per ml (at 20 °C)	0.938 - 0.942 g	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
350 nm	98%	min.
320 nm	90%	min.

Cat No.	Package	Size
GC1050-G500ML	Amber Glass	500 ML
GC1050-G1L	Amber Glass	1 Litre

290 nm	75%	min.
280 nm	65%	min.
275 nm	50%	min.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
GC1050-G2.5L	Amber Glass	2.5 Litre

## Dimethylacetamide, HPLC

Code LC1050

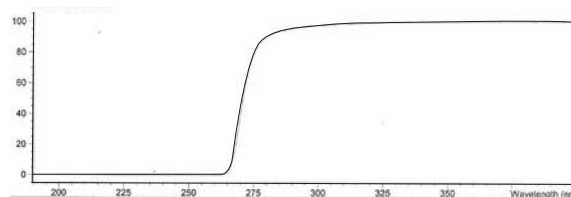
### Specifications

Assay (by GC.)	99.8%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
350 nm	99%	min.
320 nm	98%	min.
290 nm	85%	min.
280 nm	80%	min.

Cat No.	Package	Size
LC1050-G500ML	Amber Glass	500 ML
LC1050-G1L	Amber Glass	1 Litre

275 nm	60%	min.
Fluorescence (as quinine)		
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1050-G2.5L	Amber Glass	2.5 Litre
LC1050-G4L	Amber Glass	4 Litre

## Dimethylacetamide, Peptide Synthesis

Code PS1050

### Specifications

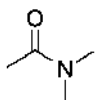
Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.

Cat No.	Package	Size
PS1050-G1L	Amber Glass	1 Litre

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
Free Amines	0.002%	max.

Cat No.	Package	Size
PS1050-G2.5L	Amber Glass	2.5 Litre

## N,N-DIMETHYLACETAMIDE



$\text{CH}_3\text{CON}(\text{CH}_3)_2$       FW. 87.12  
 CAS-No.                      127-19-5  
 Boiling Point                166 °C

Density 1 L =                0.940 Kg.  
 Melting Point                - 20 °C

### N,N-Dimethylacetamide, For Headspace GC Analysis

Code HS1050

#### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear, colorless liquid	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
UV cutoff wavelength	190-268	nm
UV Transmission Levels (%T)		
400 nm	99%	min.
350 nm	98%	min.
300 nm	85%	min.

275 nm	55%	min.
268 nm	10%	min.
Residual solvent (GC/HS) according to ICH		
Class 1 Solvents	1	ppm max.
Class 2 Solvents	10	ppm max.
Class 3 Solvents	50	ppm max.

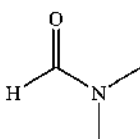
Suitable as solvent for the analysis of residual solvent of ICH classes 1,2 and 3 according to Ph Eur and USP.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
HS1050-G500ML	Amber Glass	500 ML

Cat No.	Package	Size
HS1050-G1L	Amber Glass	1 Litre

## DIMETHYLFORMAMIDE



$\text{HCON}(\text{CH}_3)_2$       FW. 73.10  
 CAS-No.                      68-12-2  
 UN No.                        2265  
 EC No.                        200-679-5  
 Class:                         3

Density 1 L =                0.949 Kg.  
 Melting Point                -61 °C  
 Boiling Point                153 °C  
 EC-Index-No                616-001-00-X  
 Packaging Group:            III



GHS:                         H226, H312 + H332, H319, H360D; P201, P202, P210, P233, P240, P241, P242, P243, P261, P264, P271, P280, P281, P302 + P352, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P308 + P313, P312, P337 + P313, P363, P370 + P378, P403 + P235, P405

### Dimethylformamide, Pharma

Code BP1051

#### Specifications

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.1%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.003	max.
Residue on Evaporation	0.001%	max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.

(Conforms to A.C.S., ISO, Reag. Ph Eur)

Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
BP1051-M25L	Metal	25 Litre

## Dimethylformamide, AR

Code AR1051

### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.8%	min.
Appearance	Clear	
Color (APHA)	15	max.
Water (by Coulometry)	0.07%	max.

Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.003	max.
Residue on Evaporation	0.001%	max.

Cat No.	Package	Size
AR1051-G500ML	Amber Glass	500 ML
AR1051-G1L	Amber Glass	1 Litre
AR1051-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1051-G4L	Amber Glass	4 Litre
AR1051-M25L	Metal	25 Litre
AR1051-M200L	Metal	200 Litre

## Dimethylformamide, RCI Premium

Code RP1051

### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.003	max.
Residue on Evaporation	0.001%	max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.

Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1051-G500ML	Amber Glass	500 ML
RP1051-G1L	Amber Glass	1 Litre
RP1051-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1051-G4L	Amber Glass	4 Litre
RP1051-M25L	Metal	25 Litre
RP1051-M200L	Metal	200 Litre

## Dimethylformamide, UV-IR

Code IR1051

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
UV Transmission Levels (%T)		
330 nm	98%	min.

300 nm	90%	min.
290 nm	80%	min.
280 nm	70%	min.
270 nm	30%	min.
Fluorescence (as quinine)		
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1051-G500ML	Amber Glass	500 ML
IR1051-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1051-G2.5L	Amber Glass	2.5 Litre
IR1051-G4L	Amber Glass	4 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

### Dimethylformamide, Anhydrous (100 ppm)

Code AH1052

#### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.

Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.

Cat No.	Package	Size
AH1052-G500ML	Amber Glass	500 ML
AH1052-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1052-G2.5L	Amber Glass	2.5 Litre
AH1052-G4L	Amber Glass	4 Litre

### Dimethylformamide (with Molecular sieve), Anhydrous (100 ppm)

Code AH1053

#### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.

.....

Added with Molecular sieve.

Cat No.	Package	Size
AH1053-G500ML	Amber Glass	500 ML
AH1053-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1053-G2.5L	Amber Glass	2.5 Litre
AH1053-G4L	Amber Glass	4 Litre

### Dimethylformamide, For GC Analysis

Code GC1051

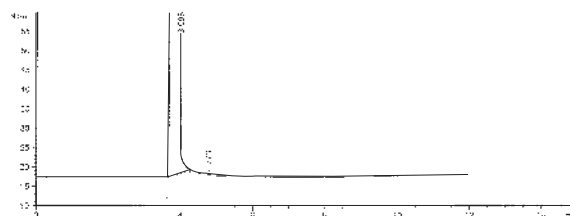
#### Specifications

Description	A clear, colorless liquid.	
	Miscible with water and	
	most organic solvents	
Assay (by GC.)	99.9%	min.
Weight per ml (at 20 °C)	0.947 - 0.949 g	
Refractive index (at 20°C)	1.429 - 1.431	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
UV Transmission Levels (%T)		
330 nm	98%	min.
300 nm	90%	min.

290 nm	80%	min.
280 nm	70%	min.
270 nm	30%	min.

.....

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
GC1051-G500ML	Amber Glass	500 ML
GC1051-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
GC1051-G2.5L	Amber Glass	2.5 Litre

## Dimethylformamide, HPLC

Code LC1051

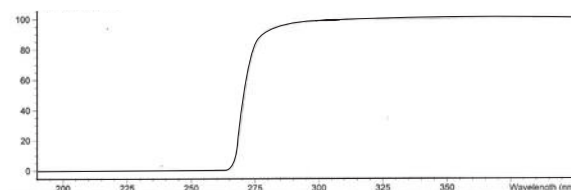
### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
320 nm	99%	min.
300 nm	98%	min.
290 nm	90%	min.
280 nm	80%	min.
275 nm	60%	min.

Cat No.	Package	Size
LC1051-G500ML	Amber Glass	500 ML
LC1051-G1L	Amber Glass	1 Litre

Fluorescence (as quinine)		
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1051-G2.5L	Amber Glass	2.5 Litre
LC1051-G4L	Amber Glass	4 Litre

## Dimethylformamide, Peptide Synthesis

Code PS1051

### Specifications

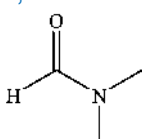
Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.

Cat No.	Package	Size
PS1051-G1L	Amber Glass	1 Litre

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
Free Amines	0.001%	max.

Cat No.	Package	Size
PS1051-G2.5L	Amber Glass	2.5 Litre

## N,N-DIMETHYLFORMAMIDE



HCON(CH<sub>2</sub>)<sub>2</sub>      FW. 73.10  
 CAS-No.            68-12-2  
 Boiling Point      153 °C

Density 1 L =            0.949 Kg.  
 Melting Point            - 61 °C

## N,N-Dimethylformamide, For Headspace GC Analysis

Code HS1051

### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear, colorless liquid	
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
UV cutoff wavelength	190-269	nm
UV Transmission Levels (%T)		
320 nm	95%	min.
300 nm	85%	min.

Cat No.	Package	Size
HS1051-G500ML	Amber Glass	500 ML

275 nm	55%	min.
270 nm	20%	min.
Residual solvent (GC/HS) according to ICH		
Class 1 Solvents	1	ppm max.
Class 2 Solvents	10	ppm max.
Class 3 Solvents	50	ppm max.

Suitable as solvent for the analysis of residual solvent of ICH classes 1,2 and 3 according to Ph Eur and USP.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
HS1051-G1L	Amber Glass	1 Litre

## DIMETHYLSULPHOXIDE



(CH<sub>3</sub>)<sub>2</sub>SO  
 CAS-No. 67-68-5  
 EC No. 200-664-3

Density 1 L = 1.100 Kg.  
 Melting Point 18.5 °C  
 Boiling Point 189 °C

### Dimethylsulphoxide, AR

Code AR1054

#### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear, colorless liquid	
Water (by Coulometry)	0.1%	max.

#### (Meet A.C.S. Specifications)

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.005%	max.

Cat No.	Package	Size
AR1054-G500ML	Amber Glass	500 ML
AR1054-G1L	Amber Glass	1 Litre
AR1054-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1054-G4L	Amber Glass	4 Litre
AR1054-M25L	Metal	25 Litre
AR1054-M200L	Metal	200 Litre

### Dimethylsulphoxide, RCI Premium

Code RP1054

#### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.1%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Heavy metals (as Pb)	0.0001%	max.
Readily carbonizable substance	Passes test	
Related substance (GC.)	Passes test	
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.

#### (Meet A.C.S. Specifications)

Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1054-G500ML	Amber Glass	500 ML
RP1054-G1L	Amber Glass	1 Litre
RP1054-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1054-G4L	Amber Glass	4 Litre
RP1054-M25L	Metal	25 Litre
RP1054-M200L	Metal	200 Litre



## Dimethylsulphoxide, UV-IR

Code IR1334

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0004%	max.
UV Transmission Levels (%T)		
350 nm	98%	min.

340 nm	95%	min.
330 nm	90%	min.
320 nm	80%	min.
Fluorescence (as quinine)		
at 365 nm	5	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1334-G500ML	Amber Glass	500 ML
IR1334-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1334-G2.5L	Amber Glass	2.5 Litre
IR1334-G4L	Amber Glass	4 Litre

## Dimethylsulphoxide, Anhydrous (200 ppm)

Code AH1055

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.

Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.

Cat No.	Package	Size
AH1055-G500ML	Amber Glass	500 ML
AH1055-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1055-G2.5L	Amber Glass	2.5 Litre
AH1055-G4L	Amber Glass	4 Litre





Dimethylsulphoxide, For GC Analysis

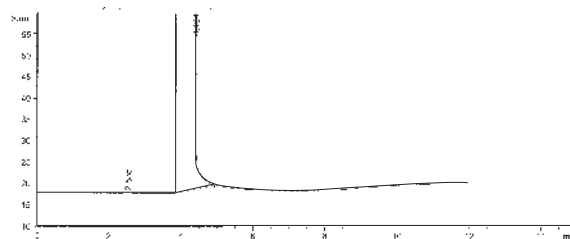
Code GC1334

Specifications

Description	Colorless, hygroscopic liquid.	
Miscibility	Miscible with water and organic solvents	
Assay (by GC.)	99.9%	min.
Weight per ml (at 20 °C)	1.099 - 1.101 g	
Refractive index (at 20 °C)	1.478 - 1.479	
Freezing / Congealing point	18.30 °C	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
350 nm	98%	min.

340 nm	95%	min.
330 nm	90%	min.
320 nm	80%	min.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
GC1334-G500ML	Amber Glass	500 ML
GC1334-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
GC1334-G2.5L	Amber Glass	2.5 Litre
GC1334-G4L	Amber Glass	4 Litre

Dimethylsulphoxide, HPLC

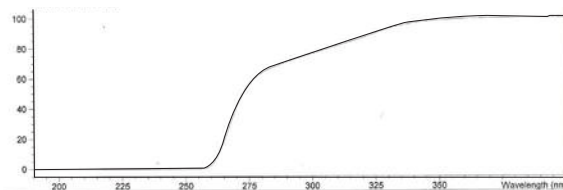
Code LC1334

Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
360 nm	98%	min.
340 nm	95%	min.
330 nm	90%	min.
310 nm	80%	min.
290 nm	65%	min.

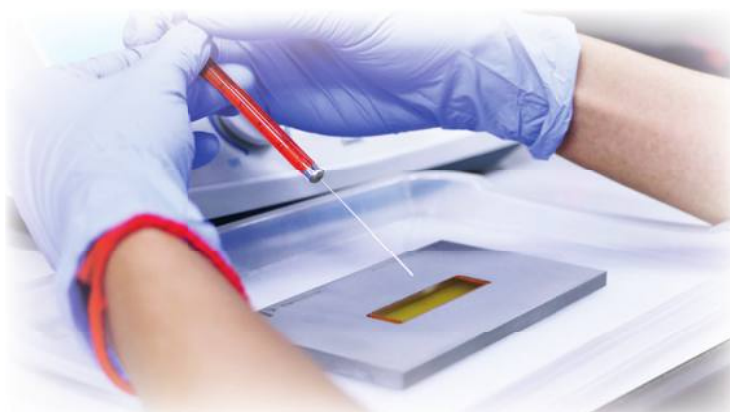
Fluorescence (as quinine)		
at 254 nm	2	ppb max.
at 365 nm	2	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1334-G500ML	Amber Glass	500 ML
LC1334-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1334-G2.5L	Amber Glass	2.5 Litre
LC1334-G4L	Amber Glass	4 Litre



## Dimethylsulphoxide, For Headspace GC Analysis

Code HS1334

### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear, colorless liquid	
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
UV cutoff wavelength	190-265	nm
UV Transmission Levels (%T)		
400 nm	98%	min.
350 nm	95%	min.
300 nm	80%	min.

Cat No.	Package	Size
HS1334-G500ML	Amber Glass	500 ML

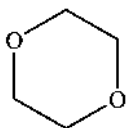
275 nm	55%	min.
268 nm	30%	min.
Residual solvent (GC/HS) according to ICH		
Class 1 Solvents	1	ppm max.
Class 2 Solvents	10	ppm max.
Class 3 Solvents	50	ppm max.

Suitable as solvent for the analysis of residual solvent of ICH classes 1,2 and 3 according to Ph Eur and USP.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
HS1334-G1L	Amber Glass	1 Litre

## 1, 4-DIOXAN



C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>  
 CAS-No. 123-91-1  
 UN No. 1165  
 EC No. 204-661-8  
 Class: 3

GHS: H225, H319, H335, H351, EUH019, EUH066; P201, P202, P210, P233, P240, P241, P242, P243, P261, P264, P271, P280, P281, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P308 + P313, P312, P337 + P313, P370 + P378, P403 + P235, P405

Density 1 L = 1.030 Kg.  
 Melting Point 12 °C  
 Boiling Point 101.5 °C  
 EC-Index-No 603-024-00-5  
 Packaging Group: II



## 1, 4-Dioxan, AR

Code AR1057

### Specifications

Assay (by GC.)	99.8%	min.
Color (APHA)	20	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.

Cat No.	Package	Size
AR1057-G500ML	Amber Glass	500 ML
AR1057-G1L	Amber Glass	1 Litre
AR1057-G2.5L	Amber Glass	2.5 Litre

(Meet A.C.S. Specifications)

Residue on Evaporation	0.001%	max.
Carbonyl (as HCHO)	0.01%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.005%	max.
Freezing point (°C)	Not below 11.0 °C	

Cat No.	Package	Size
AR1057-G4L	Amber Glass	4 Litre
AR1057-M25L	Metal	25 Litre
AR1057-M200L	Metal	200 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**1, 4-Dioxan, RCI Premium** Code RP1057

Specifications			(Meet A.C.S. Specifications)		
Assay (by GC.)	99.8%	min.	Cadmium (Cd)	0.02	ppm max.
Identity (IR)	Passes test		Calcium (Ca)	0.2	ppm max.
Color (APHA)	10	max.	Chromium (Cr)	0.01	ppm max.
Water (by Coulometry)	0.05%	max.	Cobalt (Co)	0.01	ppm max.
Acidity (mEq./g.)	0.0005	max.	Copper (Cu)	0.01	ppm max.
Residue on Evaporation	0.001%	max.	Iron (Fe)	0.05	ppm max.
Carbonyl (as HCHO)	0.01%	max.	Lead (Pb)	0.05	ppm max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.005%	max.	Magnesium (Mg)	0.05	ppm max.
Freezing point (°C)	Not below 11.0 °C		Manganese (Mn)	0.01	ppm max.
Aluminium (Al)	0.2	ppm max.	Nickel (Ni)	0.01	ppm max.
Barium (Ba)	0.05	ppm max.	Tin (Sn)	0.05	ppm max.
Boron (B)	0.01	ppm max.	Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1057-G500ML	Amber Glass	500 ML
RP1057-G1L	Amber Glass	1 Litre
RP1057-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1057-G4L	Amber Glass	4 Litre
RP1057-M25L	Metal	25 Litre
RP1057-M200L	Metal	200 Litre

**1, 4-Dioxan, UV-IR** Code IR1057

Specifications		
Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
UV Transmission Levels (%T)		
310 nm	98%	min.
300 nm	95%	min.
290 nm	90%	min.
280 nm	80%	min.
270 nm	70%	min.
Fluorescence (as quinine)		
at 254 nm	5	ppb max.
at 365 nm	2	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1057-G500ML	Amber Glass	500 ML
IR1057-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1057-G2.5L	Amber Glass	2.5 Litre
IR1057-G4L	Amber Glass	4 Litre

**1, 4-Dioxan, Anhydrous (50 ppm)** Code AH1058

Specifications		
Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.005%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.005%	max.

Cat No.	Package	Size
AH1058-G500ML	Amber Glass	500 ML
AH1058-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1058-G2.5L	Amber Glass	2.5 Litre
AH1058-G4L	Amber Glass	4 Litre

## 1, 4-Dioxan, HPLC

Code LC1057

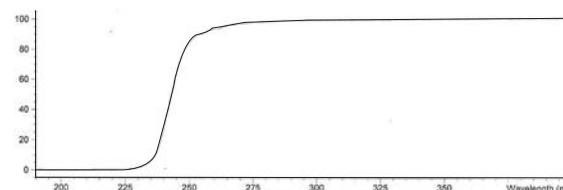
### Specifications

Assay (by GC.)	99.8%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
UV Transmission Levels (%T)		
290 nm	98%	min.
280 nm	95%	min.
270 nm	90%	min.
260 nm	85%	min.
250 nm	80%	min.

Cat No.	Package	Size
LC1057-G500ML	Amber Glass	500 ML
LC1057-G1L	Amber Glass	1 Litre

Fluorescence (as quinine)		
at 254 nm	5	ppb max.
at 365 nm	2	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1057-G2.5L	Amber Glass	2.5 Litre
LC1057-G4L	Amber Glass	4 Litre

## 1, 4-Dioxan, AR

Code AR1059B

### Specifications

Assay (by GC.)	99.8%	min.
Color (APHA)	20	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.005%	max.

Cat No.	Package	Size
AR1059B-G500ML	Amber Glass	500 ML
AR1059B-G1L	Amber Glass	1 Litre
AR1059B-G2.5L	Amber Glass	2.5 Litre

(Meet A.C.S. Specifications)

Carbonyl (as HCHO)	0.01%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.005%	max.
Freezing point (°C)	Not below 11.0 °C	

Stabilized with about 25 ppm BHT.

Cat No.	Package	Size
AR1059B-G4L	Amber Glass	4 Litre
AR1059B-M25L	Metal	25 Litre
AR1059B-M200L	Metal	200 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

### 1, 4-Dioxan, RCI Premium

Code RP1059B

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Acetaldehyde	0.05%	max.
Formaldehyde	0.005%	max.
Carbonyl (as HCHO)	0.01%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.005%	max.
Freezing point (°C)	Not below 11.0 °C	
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.

Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Stabilized with about 25 ppm BHT.

Cat No.	Package	Size
RP1059B-G500ML	Amber Glass	500 ML
RP1059B-G1L	Amber Glass	1 Litre
RP1059B-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1059B-G4L	Amber Glass	4 Litre
RP1059B-M25L	Metal	25 Litre
RP1059B-M200L	Metal	200 Litre

### 1, 4-Dioxan, Anhydrous (50 ppm)

Code AH1060B

#### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.005%	max.
Acidity (mEq./g.)	0.0005	max.

Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.005%	max.

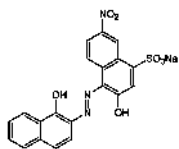
Stabilized with about 25 ppm BHT.

Cat No.	Package	Size
AH1060B-G500ML	Amber Glass	500 ML
AH1060B-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1060B-G2.5L	Amber Glass	2.5 Litre
AH1060B-G4L	Amber Glass	4 Litre



## ERIOCHROME BLACK T



$C_{20}H_{12}N_3NaO_7S$	FW. 461.38	Density =	- g/cm <sup>3</sup>
CAS-No. 1787-61-7		EC No.	217-250-3
UN No. 3077		Packaging Group:	III
Class: 9			
GHS:	H319, H411; P264, P273, P280, P305 + P351 + P338, P337 + P313, P391		



### Eriochrome Black T Indicator

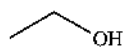
Code AR1252

#### Specifications

Appearance	Brownish black powder	Absorption maximum (pH 10)	612 - 616 nm
Suitable as metal indicator	Passes test		

Cat No.	Package	Size
AR1252-G25G	Amber Glass	25 G

## ETHANOL 50%



$C_2H_5OH$	FW. 46.07	Density 1 L =	0.930 Kg.
CAS-No. 64-17-5		Melting Point	-114.5 °C
UN No. 1170		Boiling Point	78.3 °C
EC No. 200-578-6		EC-Index-No.	603-002-00-5
Class: 3		Packaging Group:	II
GHS:	H226, H319; P210, P233, P240, P241, P242, P243, P264, P280, P303+P361+P353, P305+P351+P338, P337+P313, P370+P378, P403+P235		



### Ethanol 50%

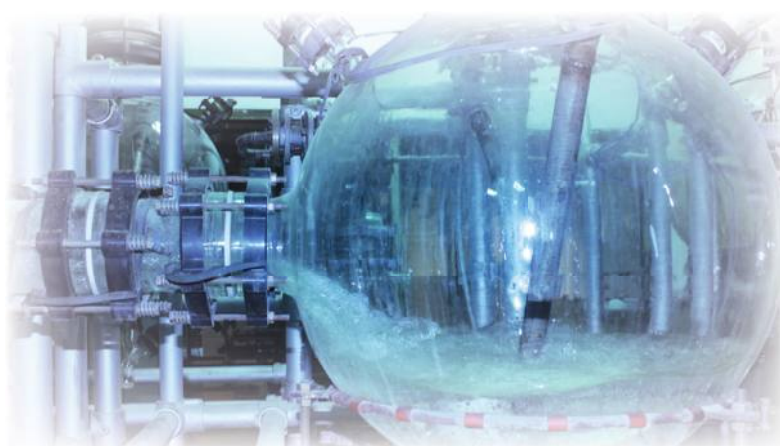
Code AR1296

#### Specifications

Assay (by GC.- correct for water)	50%	min.	Solubility in water	Passes test
Color (APHA)	10	max.	Substances darkened by sulfuric acid	Passes test
Water (by Coulometry)	50%	max.	Substances reducing permanganate	Passes test
Acidity (mEq./g.)	0.0005	max.		
Alkalinity (mEq./g.)	0.0002	max.		
Residue on Evaporation	0.001%	max.	Denatured with 8-12 ppm Denatonium benzoate.	

Cat No.	Package	Size
AR1296-P2.5L	Plastic	2.5 Litre
AR1296-P4L	Plastic	4 Litre

Cat No.	Package	Size
AR1296-P20L	Plastic	20 Litre





## Ethanol 50%, AR

Code AR1382

### Specifications

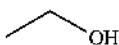
Assay (by GC.- correct for water)	50%	min.
Color (APHA)	10	max.
Water (by Coulometry)	50%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.001%	max.

Solubility in water	Passes test
Substances darkened by sulfuric acid	Passes test
Substances reducing permanganate	Passes test

Denatured with Denatonium benzoate 8-12 ppm and Tert Butyl Alcohol less than 0.15%.

Cat No.	Package	Size
AR1382-P20L	Plastic	20 Litre

## ETHANOL 95%



$C_2H_5OH$	FW. 46.07	Density 1 L =	0.803 - 0.810 Kg.
CAS-No.	64-17-5	UN No.	1993
EC No.	200-578-6	EC-Index-No	603-002-00-5
Class:	3	Packaging Group:	II
GHS:	H225, H301 + H311 + H331, H319, H370; P210, P233, P240, P241, P242, P243, P260, P264, P270, P271, P280, P301 + P310, P302 + P352, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P308 + P311, P312, P330, P337 + P313, P361 + P364, P370 + P378, P370 + P378, P405		



## Ethanol 95%, AR

Code AR1409

### Specifications

Assay	94.0 - 95.0% (v/v)
Appearance	Clear, colorless liquid
Acidity ( as Acetic acid )	22 ppm max.
Water (by Coulometry)	6% max.

Non-volatile matter	0.005%	max.
Aldehydes	5	ppm max.

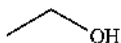
Denatured with Methanol 5 - 6% (v/v).

Cat No.	Package	Size
AR1409-M200L	Metal	200 Litre





## ETHANOL 96%



C <sub>2</sub> H <sub>5</sub> OH	FW. 46.07	Density 1 L =	0.805 - 0.810 Kg.
CAS-No.	64-17-5	UN No.	1170
EC No.	200-578-6	EC-Index-No	603-002-00-5
Class:	3	Packaging Group:	II
GHS:	H225, H319, H370; P210, P233,P240, P241, P242, P243, P264, P280, P303 + P361 + P353, P305 + P351 + P338, P337 + P313, P370 + P378, P403+P325		



### Ethanol 96%, AR

Code AR1383

#### Specifications

Assay	96% (v/v)	min.	Calcium (Ca)	0.5	ppm max.
Color (APHA)	10	max.	Chromium (Cr)	0.02	ppm max.
Acidity (mEq./g.)	0.0005	max.	Cobalt (Co)	0.02	ppm max.
Alkalinity (mEq./g.)	0.0002	max.	Copper (Cu)	0.02	ppm max.
Residue on Evaporation	0.001%	max.	Iron (Fe)	0.1	ppm max.
Acetone (GC.)	0.001%	max.	Lead (Pb)	0.05	ppm max.
Benzene (GC.)	0.0002%	max.	Magnesium (Mg)	0.05	ppm max.
Methanol (GC.)	0.05%	max.	Manganese (Mn)	0.02	ppm max.
Propan-2-ol (GC.)	0.003%	max.	Nickel (Ni)	0.02	ppm max.
Fusel oil	Passes test		Potassium (K)	0.1	ppm max.
Solubility in water	Passes test		Sodium (Na)	0.5	ppm max.
Substances darkened by sulfuric acid	Passes test		Strontium (Sr)	0.02	ppm max.
Substances reducing permanganate	Passes test		Tin (Sn)	0.1	ppm max.
Aluminium (Al)	0.1	ppm max.	Zinc (Zn)	0.1	ppm max.
Barium (Ba)	0.02	ppm max.			
Boron (B)	0.02	ppm max.			
Cadmium (Cd)	0.05	ppm max.			

Denatured with 8-12 ppm Denatonium benzoate and about 0.15% of Tert Butyl Alcohol.

Cat No.	Package	Size
AR1383-P2.5L	Plastic	2.5 Litre

### Ethanol 96%, AR

Code AR1361

#### Specifications

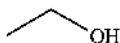
Assay	96% (v/v)	min.	Calcium (Ca)	0.5	ppm max.
Color (APHA)	10	max.	Chromium (Cr)	0.02	ppm max.
Acidity (mEq./g.)	0.0005	max.	Cobalt (Co)	0.02	ppm max.
Alkalinity (mEq./g.)	0.0002	max.	Copper (Cu)	0.02	ppm max.
Residue on Evaporation	0.001%	max.	Iron (Fe)	0.1	ppm max.
Acetone (GC.)	0.001%	max.	Lead (Pb)	0.05	ppm max.
Benzene (GC.)	0.0002%	max.	Magnesium (Mg)	0.05	ppm max.
Methanol (GC.)	0.05%	max.	Manganese (Mn)	0.02	ppm max.
Propan-2-ol (GC.)	0.003%	max.	Nickel (Ni)	0.02	ppm max.
Fusel oil	Passes test		Potassium (K)	0.1	ppm max.
Solubility in water	Passes test		Sodium (Na)	0.5	ppm max.
Substances darkened by sulfuric acid	Passes test		Strontium (Sr)	0.02	ppm max.
Substances reducing permanganate	Passes test		Tin (Sn)	0.1	ppm max.
Aluminium (Al)	0.1	ppm max.	Zinc (Zn)	0.1	ppm max.
Barium (Ba)	0.02	ppm max.			
Boron (B)	0.02	ppm max.			
Cadmium (Cd)	0.05	ppm max.			

Denatured with 8-12 ppm Denatonium benzoate.

Cat No.	Package	Size
AR1361-P2.5L	Plastic	2.5 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## ETHANOL



C <sub>2</sub> H <sub>5</sub> OH	FW. 46.07	Density 1 L =	0.790 Kg.
CAS-No.	64-17-5	Melting Point	-114.5 °C
UN No.	1170	Boiling Point	78.3 °C
EC No.	200-578-6	EC-Index-No	603-002-00-5
Class:	3	Packaging Group:	II
GHS: H225, H319; P210, P233, P240, P241, P242, P243, P264, P280, P303+P361+P353, P305+P351+P338, P337+P313, P370+P378, P403+P235			



### Ethanol, Pharma

Code BP1069

#### Specifications

(Conforms to BP/EP/USP/NF)

Assay (by GC.)	99.9%	min.
Identification	Passes test	
Appearance	Passes test	
Color of Solution	Passes test	
Clarity of Solution	Passes test	
Water content (by Coulometry)	0.2%	max.
Acidity or alkalinity (as acetic acid)	30	ppm max.
Non-volatile matter	0.001%	max.
Methanol (GC.)	200	ppb max.
Acetaldehyde and Acetal (GC.)	10	ppb max.

Benzene (GC.)	2	ppb max.
Total of other impurities	300	ppb max.
Solubility	Passes test	
UV Absorbance		
270 - 340 nm	0.10	AU max.
250 - 260 nm	0.30	AU max.
240 nm	0.40	AU max.
Relative density @ 20 °C	0.790 - 0.793	

Denatured with 8-12 ppm Denatonium benzoate.

Cat No.	Package	Size
BP1069-G500ML	Glass	500 ml.
BP1069-G1L	Glass	1 Litre

Cat No.	Package	Size
BP1069-P2.5L	Plastic	2.5 Litre
BP1069-P20L	Plastic	20 Litre

### Ethanol, Pharma

Code BP1380

#### Specifications

(Conforms to BP/EP/USP/NF)

Assay (by GC.)	99.7%	min.
Identification	Passes test	
Appearance	Passes test	
Color of Solution	Passes test	
Clarity of Solution	Passes test	
Water (by Coulometry)	0.2%	max.
Acidity or alkalinity (as acetic acid)	30	ppm max.
Non-volatile matter	0.001%	max.
Methanol (GC.)	200	ppm max.
Acetaldehyde and Acetal (GC.)	10	ppm max.
Benzene (GC.)	2	ppm max.

Total of other impurities	300	ppm max.
Disregard limit	9	ppm max.
Solubility	Passes test	
UV Absorbance		
270 - 340 nm	0.10	AU max.
250 - 260 nm	0.30	AU max.
240 nm	0.40	AU max.
Relative density @ 20 C	0.790 - 0.793	

Denatured with Denatonium benzoate 8-12 ppm and Tert Butyl Alcohol less than 0.15%.

Cat No.	Package	Size
BP1380-G500ML	Amber Glass	500 ML
BP1380-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
BP1380-P2.5L	Plastic	2.5 Litre
BP1380-P20L	Plastic	20 Litre

## Ethanol, AR

Code AR1069

## Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.9%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.001%	max.
Acetone (GC.)	0.001%	max.
Methanol (GC.)	0.05%	max.
Propan-2-ol (GC.)	0.003%	max.
Fusel oil	Passes test	
Solubility in water	Passes test	
Substances darkened by sulfuric acid	Passes test	
Substances reducing permanganate	Passes test	
Aluminium (Al)	0.1	ppm max.
Barium (Ba)	0.02	ppm max.
Boron (B)	0.02	ppm max.
Cadmium (Cd)	0.05	ppm max.

Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Potassium (K)	0.1	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.02	ppm max.
Tin (Sn)	0.1	ppm max.
Zinc (Zn)	0.1	ppm max.

Denatured with 8-12 ppm Denatonium benzoate.

Cat No.	Package	Size
AR1069-G500ML	Amber Glass	500 ML
AR1069-G1L	Plastic	1 Litre
AR1069-G2.5L	Amber Glass	2.5 Litre
AR1069-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1069-G4L	Amber Glass	4 Litre
AR1069-P4L	Plastic	4 Litre
AR1069-P20L	Plastic	20 Litre
AR1069-P200L	Plastic	200 Litre

## Ethanol, AR

Code AR1380

## Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.7%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.2%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.001%	max.
Acetone (GC.)	0.001%	max.
Methanol (GC.)	0.05%	max.
Propan-2-ol (GC.)	0.003%	max.
Fusel oil	Passes test	
Solubility in water	Passes test	
Substances darkened by sulfuric acid	Passes test	
Substances reducing permanganate	Passes test	
Aluminium (Al)	0.1	ppm max.
Barium (Ba)	0.02	ppm max.
Boron (B)	0.02	ppm max.
Cadmium (Cd)	0.05	ppm max.

Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Potassium (K)	0.1	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.02	ppm max.
Tin (Sn)	0.1	ppm max.
Zinc (Zn)	0.1	ppm max.

Denatured with Denatonium benzoate 8-12 ppm and Tert Butyl Alcohol less than 0.15%.

Cat No.	Package	Size
AR1380-G500ML	Amber Glass	500 ML
AR1380-G1L	Amber Glass	1 Litre
AR1380-G2.5L	Amber Glass	2.5 Litre
AR1380-G4L	Amber Glass	4 Litre
AR1380-M200L	Metal	200 Litre

Cat No.	Package	Size
AR1380-P1L	Plastic	1 Litre
AR1380-P2.5L	Plastic	2.5 Litre
AR1380-P4L	Plastic	4 Litre
AR1380-P20L	Plastic	20 Litre
AR1380-P200L	Plastic	200 Litre

**Ethanol, RCI Premium**

**Code RP1069**

**Specifications**

**(Meet A.C.S. Specifications)**

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Appearance	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.1%	max.
Acid or alkalinity	30	ppm max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Aldehydes (as Acetaldehyde)	0.001%	max.
Carbonyl compounds (as CO)	0.003%	max.
Acetone (GC.)	0.001%	max.
Ethylmethylketone (GC.)	0.02%	max.
Higher alcohols (GC.)	0.01%	max.
Isoamyl alcohol (GC.)	0.05%	max.
Methanol (GC.)	0.01%	max.
Propan-2-ol (GC.)	0.003%	max.
Acetaldehyde and Acetal	10	ppm max.
Benzene	2	ppm max.
Total of other impurities	300	ppm max.
Fusel oil	Passes test	
Readily carbonizable substances	Passes test	
Solubility in water	Passes test	

Substances darkened by sulfuric acid	Passes test	
Substances reducing permanganate	0.0002%	max.
Aluminium (Al)	0.1	ppm max.
Barium (Ba)	0.02	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Potassium (K)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.02	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Denatured with 8-12 ppm Denatonium benzoate.

Cat No.	Package	Size
RP1069-G500ML	Amber Glass	500 ML
RP1069-G1L	Amber Glass	1 Litre
RP1069-G2.5L	Amber Glass	2.5 Litre
RP1069-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
RP1069-G4L	Amber Glass	4 Litre
RP1069-P4L	Plastic	4 Litre
RP1069-P20L	Plastic	20 Litre
RP1069-P200L	Plastic	200 Litre



## Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.7%	min.
Identity (IR)	Passes test	
Appearance	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.1%	max.
Acid or alkalinity	30	ppm max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Aldehydes (as Acetaldehyde)	0.001%	max.
Carbonyl compounds (as CO)	0.003%	max.
Acetone (GC.)	0.001%	max.
Ethylmethylketone (GC.)	0.02%	max.
Higher alcohols (GC.)	0.01%	max.
Isoamyl alcohol (GC.)	0.05%	max.
Methanol (GC.)	0.01%	max.
Propan-2-ol (GC.)	0.003%	max.
Acetaldehyde and Acetal	10	ppm max.
Benzene	2	ppm max.
Total of other impurities	300	ppm max.
Fusel oil	Passes test	
Readily carbonizable substances	Passes test	
Solubility in water	Passes test	

Substances darkened by sulfuric acid	Passes test	
Substances reducing permanganate	0.0002%	max.
Aluminium (Al)	0.1	ppm max.
Barium (Ba)	0.02	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Potassium (K)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.02	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Denatured with 8-12 ppm Denatonium benzoate and about 0.15% of Tert Butyl Alcohol.

Cat No.	Package	Size
RP1380-G500ML	Amber Glass	500 ML
RP1380-G1L	Amber Glass	1 Litre
RP1380-G2.5L	Amber Glass	2.5 Litre
RP1380-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
RP1380-P2.5L	Plastic	2.5 Litre
RP1380-P4L	Plastic	4 Litre
RP1380-P20L	Plastic	20 Litre



A  
B  
C  
D  
**E**  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Ethanol, HPLC

Code LC1380

### Specifications

(Conforms to ACS/BP/EP/USP/NF)

Assay (by GC.)	99.7%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Color of solution	Passes test	
Clarity of solution	Passes test	
Water (by Coulometry)	0.1%	max.
Acid or alkalinity	30	ppm max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Aldehydes (as Acetaldehyde)	0.001%	max.
Carbonyl compounds (as CO)	0.003%	max.
Acetone (GC.)	0.001%	max.
Ethylmethylketone (GC.)	0.02%	max.
Higher alcohols (GC.)	0.01%	max.
Isoamyl alcohol (GC.)	0.05%	max.
Methanol (GC.)	0.01%	max.
Propan-2-ol (GC.)	0.003%	max.
Acetaldehyde and Acetal	10	ppm max.
Benzene	2	ppm max.
Total of other impurities	300	ppm max.
Disregard limit	9	ppm max.
Fusel oil	Passes test	
Readily carbonizable substances	Passes test	
Solubility in water	Passes test	
Substances reducing permanganate	0.0002%	max.
Chloride (Cl)	0.3	ppm max.
Nitrate (NO <sub>3</sub> )	0.3	ppm max.
Phosphate (PO <sub>4</sub> )	0.3	ppm max.
Sulfate (SO <sub>4</sub> )	0.3	ppm max.
Aluminium (Al)	0.5	ppm max.
Antimony (Sb)	0.02	ppm max.

Arsenic (As)	0.02	ppm max.
Barium (Ba)	0.1	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.02	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Gallium (Ga)	0.02	ppm max.
Gold (Au)	0.02	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Platinum (Pt)	0.02	ppm max.
Lead (Pb)	0.1	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Silver (Ag)	0.02	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.02	ppm max.
Thallium (Tl)	0.02	ppm max.
Vanadium (V)	0.02	ppm max.
Zinc (Zn)	0.1	ppm max.
Zirconium (Zr)	0.02	ppm max.
UV Absorbance		
270 - 340 nm	0.10	AU max.
250 - 260 nm	0.30	AU max.
240 nm	0.40	AU max.

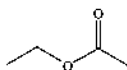
Denatured with Tert Butyl Alcohol less than 0.15% (v/v).

Cat No.	Package	Size
LC1380-G500ML	Amber Glass	500 ML

Cat No.	Package	Size
LC1380-G2.5L	Amber Glass	2.5 Litre



## ETHYL ACETATE



CH <sub>3</sub> COOC <sub>2</sub> H <sub>5</sub>	FW. 88.11	Density 1 L =	0.900 Kg.
CAS-No.	141-78-6	Melting Point	-83 °C
UN No.	1173	Boiling Point	77 °C
EC No.	205-500-4	EC-Index-No	607-022-00-5
Class:	3	Packaging Group:	II
GHS:	H225, H319, H336, EUH066; P210, P233, P240, P241, P242, P243, P261, P264, P271, P280, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P312, P337 + P313, P370 + P378, P403 + P235, P405		



### Ethyl Acetate, AR

Code AR1070

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.8%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Substances darkened by sulfuric acid	Passes test	

Cat No.	Package	Size
AR1070-G500ML	Amber Glass	500 ML
AR1070-G1L	Amber Glass	1 Litre
AR1070-G2.5L	Amber Glass	2.5 Litre
AR1070-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1070-G4L	Amber Glass	4 Litre
AR1070-P4L	Plastic	4 Litre
AR1070-P20L	Plastic	20 Litre
AR1070-P200L	Plastic	200 Litre

### Ethyl Acetate, RCI Premium

Code RP1070

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Acetone (GC.)	0.001%	max.
Ethanol (GC.)	0.1%	max.
Methanol (GC.)	0.1%	max.
Methyl acetate (GC.)	0.1%	max.
Propan-2-ol (GC.)	0.003%	max.
Readily carbonizable substance	Passes test	
Substances darkened by sulfuric acid	Passes test	
Aluminium (Al)	0.1	ppm max.
Barium (Ba)	0.02	ppm max.

Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Potassium (K)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.02	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1070-G500ML	Amber Glass	500 ML
RP1070-G1L	Amber Glass	1 Litre
RP1070-G2.5L	Amber Glass	2.5 Litre
RP1070-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
RP1070-G4L	Amber Glass	4 Litre
RP1070-P4L	Plastic	4 Litre
RP1070-P20L	Plastic	20 Litre
RP1070-P200L	Plastic	200 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Ethyl Acetate, UV-IR

Code IR1070

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
300 nm	99%	min.

280 nm	95%	min.
270 nm	90%	min.
260 nm	70%	min.
Fluorescence (as quinine)		
at 254 nm	2	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1070-G500ML	Amber Glass	500 ML
IR1070-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1070-G2.5L	Amber Glass	2.5 Litre
IR1070-G4L	Amber Glass	4 Litre

## Ethyl Acetate, Anhydrous (100 ppm)

Code AH1071

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.

Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.

Cat No.	Package	Size
AH1071-G500ML	Amber Glass	500 ML
AH1071-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1071-G2.5L	Amber Glass	2.5 Litre
AH1071-G4L	Amber Glass	4 Litre

## Ethyl Acetate, Anhydrous (50 ppm)

Code AH1315

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.005%	max.

Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.

Cat No.	Package	Size
AH1315-G500ML	Amber Glass	500 ML
AH1315-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1315-G2.5L	Amber Glass	2.5 Litre
AH1315-G4L	Amber Glass	4 Litre



## Ethyl Acetate, HPLC

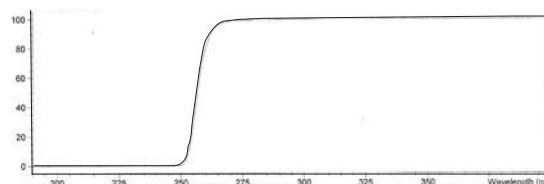
Code LC1070

### Specifications

Assay (by GC.)	99.8%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
300 nm	99%	min.
280 nm	98%	min.
270 nm	95%	min.

260 nm	70%	min.
Fluorescence (as quinine)		
at 254 nm	2	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1070-G500ML	Amber Glass	500 ML
LC1070-G1L	Amber Glass	1 Litre

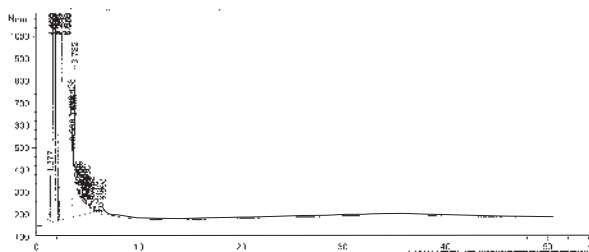
Cat No.	Package	Size
LC1070-G2.5L	Amber Glass	2.5 Litre
LC1070-G4L	Amber Glass	4 Litre

## Ethyl Acetate, Pesticide

Code PC1070

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	ng/L



Cat No.	Package	Size
PC1070-G500ML	Amber Glass	500 ML
PC1070-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1070-G2.5L	Amber Glass	2.5 Litre
PC1070-G4L	Amber Glass	4 Litre

## Ethyl Acetate, LV-GC

Code LV1070

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard)	10	pg/ml max.
Single impurity peak		
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1070-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1070-G2.5L	Amber Glass	2.5 Litre

A  
B  
C  
D  
**E**  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Ethyl Acetate, Peptide Synthesis

Code PS1070

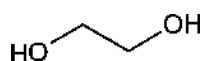
### Specifications

Assay (by GC.)	99.9%	min.	Acidity (mEq./g.)	0.0005	max.
Identity (IR)	Passes test		Alkalinity (mEq./g.)	0.0002	max.
Color (APHA)	10	max.	Residue on Evaporation	0.0003%	max.
Water (by Coulometry)	0.01%	max.	Free Amines	0.001%	max.

Cat No.	Package	Size
PS1070-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PS1070-G2.5L	Amber Glass	2.5 Litre

## ETHYLENE GLYCOL



$C_2H_6O_2$  FW. 62.07  
 EC No. 203-473-3  
 CAS-No. 107-21-1  
 Boiling Point 197.6 °C

Density 1 L= 1.110 Kg.  
 EC-Index-No 603-027-001  
 Melting Point - 13 °C



GHS: H302,H373; P260, P264, P270, P301+P312, P314, P330

## Ethylene Glycol, AR

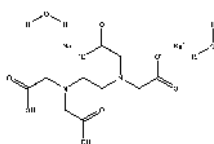
Code AR1294

### Specifications

Assay (by GC.)	99.5%	min.	Acidity (as acetic acid)	10	ppm max.
Identity (IR)	Passes test		Chloride (Cl)	0.1	ppm max.
Appearance	Passes test		Aldehydes (as formaldehyde)	0.0008%	max.
Color (APHA)	10	max.	Iron (Fe)	0.05	ppm max.
Water (by Coulometry)	0.02%	max.	Sulfated ash	0.001%	max.

Cat No.	Package	Size
AR1294-P4L	Plastic	4 Litre

## ETHYLENEDIAMINE TETRAACETIC ACID DISODIUM SALT DIHYDRATE



$C_{10}H_{14}N_2O_8Na_2 \cdot 2H_2O$  FW. 372.24  
 CAS-No. 6381-92-6  
 EC No. 205-358-3

Melting Point 252 °C



GHS : H332, H373; P260, P271, P304+P340, P314

## Ethylenediamine Tetraacetic Acid, Disodium Salt Dihydrate, AR

Code AR1240

### Specifications

(Meet A.C.S. Specifications)

Assay	99.0 - 101.0%		Nitritotriacetic acid	0.1%	max.
Identification	Passes test		Heavy metals (as Pb)	0.005%	max.
pH (5% solution at 25 °C)	4.0 - 6.0		Iron (Fe)	0.01%	max.
Insoluble matter	0.005%	max.			

Cat No.	Package	Size
AR1240-P500G	Plastic	500 G
AR1240-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1240-P5KG	Plastic	5 KG
AR1240-P25KG	Plastic	25 KG

## Ethylenediamine Tetraacetic Acid, Disodium Salt Dihydrate, RCI Premium

Code RP1240

### Specifications

( Meet ACS, Ph Eur, USP, BP)

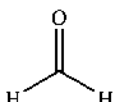
Assay	99.0 - 101.0%
Identity (IR)	Passes test
Loss on drying (150 °C)	8.7 - 11.4%
Insoluble matter	0.005% max.
Appearance of solution	Passes test
Residual Solvents	Passes test
pH (1%, 25°C)	4.3 - 4.7
pH (5%, 25°C)	4.0 - 6.0
pH (5%, 20°C)	4.0 - 5.0
Nitrilotriacetic acid [(HOCOCH <sub>2</sub> ) <sub>2</sub> N]	0.1% max.

Chloride (Cl)	0.01%	max.
Cyanide (CN)	0.001%	max.
Sulfate (SO <sub>4</sub> )	0.05%	max.
Arsenic (As)	0.0001%	max.
Calcium (Ca)	Passes test	
Copper (Cu)	0.0002%	max.
Iron (Fe)	10	ppm max.
Lead (Pb)	10	ppm max.
Heavy metals (as Pb)	10	ppm max.

Cat No.	Package	Size
RP1240-P500G	Plastic	500 G
RP1240-P1KG	Plastic	1 KG

Cat No.	Package	Size
RP1240-P5KG	Plastic	5 KG

## FORMALDEHYDE



HCHO	FW. 30.03
CAS-No.	50-00-0
UN No.	2209
EC-Index-No	605-001-00-5
Packaging Group:	III

Density 1 L =	1.090 Kg.
Melting Point	<-15 °C
EC No.	200-001-8
Class:	8



GHS: H301 + H311 + H331, H314, H317, H335, H350, H370; P201, P202, P260, P261, P264, P270, P271, P272, P280, P301 + P330+ P331, P302 + P352,P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P308 + P311, P310, P312, P333 + P313, P362+P364, P363, P403 + P233, P405

## Formaldehyde 35-40%, AR

Code AR1072M

### Specifications

Assay	35.0-40.0%
Acidity (mEq./g.)	0.01 max.

Residue on Evaporation	0.005%	max.
------------------------	--------	------

Stabilized with 4-12% w/w methanol.

Cat No.	Package	Size
AR1072M-G500ML	Amber Glass	500 ML
AR1072M-G1L	Amber Glass	1 Litre
AR1072M-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1072M-P4L	Plastic	4 Litre
AR1072M-P20L	Plastic	20 Litre
AR1072M-P200L	Plastic	200 Litre

## Formaldehyde 37%, AR

Code AR1073M

### Specifications

(Meet A.C.S. Specifications)

Assay	37.0%	min.
Identification A	Passes test	
Identification B	Passes test	
Appearance	Clear, free of suspended matter	
Color (APHA)	10	max.
Acidity (mEq./g.)	0.006	max.

Residue on Evaporation	0.005%	max.
Sulfate (SO <sub>4</sub> )	0.002%	max.
Chloride (Cl)	5	ppm max.
Heavy metals (as Pb)	5	ppm max.
Iron (Fe)	5	ppm max.

Stabilized with 10-15% w/w methanol.

Cat No.	Package	Size
AR1073M-G500ML	Amber Glass	500 ML
AR1073M-G1L	Amber Glass	1 Litre
AR1073M-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1073M-P4L	Plastic	4 Litre
AR1073M-P20L	Plastic	20 Litre
AR1073M-P200L	Plastic	200 Litre

Formaldehyde 40%, AR

Code AR1074M

Specifications

Assay	40.0%	min.
Acidity (mEq./g.)	0.01	max.

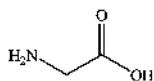
Residue on Evaporation	0.005%	max.
------------------------	--------	------

Stabilized with 4-12% w/w methanol.

Cat No.	Package	Size
AR1074M-G500ML	Amber Glass	500 ML
AR1074M-G1L	Amber Glass	1 Litre
AR1074M-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1074M-P4L	Plastic	4 Litre
AR1074M-P20L	Plastic	20 Litre
AR1074M-P200L	Plastic	200 Litre

GLYCINE



NH<sub>2</sub>CH<sub>2</sub>COOH      FW. 75.07  
CAS-No.                56-40-6  
EC No.                 200-272-2

Density =                1.595 g/cm<sup>3</sup>  
Melting Point         232 - 236 °C

Glycine, AR

Code AR1077

Specifications

Description	White crystalline powder	
Assay	99.0%	min.
Loss on drying	0.2%	max.
Residue on Ignition	0.05%	max.

Chloride (Cl)	0.002%	max.
Sulfate (SO <sub>4</sub> )	0.002%	max.
Heavy metals (as Pb)	0.002%	max.

Cat No.	Package	Size
AR1077-P500G	Plastic	500 G



## n-HEPTANE



CH <sub>3</sub> (CH <sub>2</sub> ) <sub>5</sub> CH <sub>3</sub>	FW. 100.21	Density 1 L =	0.680 Kg.
CAS-No.	142-82-5	Melting Point	-90.5 °C
UN No.	1206	Boiling Point	97-98 °C
EC No.	205-563-8	EC-Index-No	601-008-00-2
Class:	3	Packaging Group:	II
GHS:	H225, H304, H315, H336, H410; P210, P233, P240, P241, P242, P243, P261, P264, P271, P273, P280, P301 + P310, P302 + P352, P303 + P361 + P353, P304 + P340, P312, P331, P332 + P313, P362+P364, P391, P370 + P378, P403 + P235, P405		



### n-Heptane 95%, AR

Code AR1078

#### Specifications

Assay (by GC.)	95.0%	min.	Residue on Evaporation	0.001%	max.
Water (by Coulometry)	0.02%	max.	Sulfur Compounds (S)	0.001%	max.
Acidity (mEq./g.)	0.0005	max.			

Cat No.	Package	Size
AR1078-G500ML	Amber Glass	500 ML
AR1078-G1L	Amber Glass	1 Litre
AR1078-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1078-G4L	Amber Glass	4 Litre
AR1078-M20L	Metal	20 Litre

### n-Heptane 95%, RCI Premium

Code RP1078

#### Specifications

(Meet USP/NF)

Assay (by GC.)	95.0%	min.	Cadmium (Cd)	0.02	ppm max.
Identity (IR)	Passes test		Calcium (Ca)	0.2	ppm max.
Appearance	Clear		Chromium (Cr)	0.01	ppm max.
Color (APHA)	10	max.	Cobalt (Co)	0.01	ppm max.
Water (by Coulometry)	0.01%	max.	Copper (Cu)	0.01	ppm max.
Acidity (mEq./g.)	0.0005	max.	Iron (Fe)	0.05	ppm max.
Residue on Evaporation	0.001%	max.	Lead (Pb)	0.05	ppm max.
Aromatic hydrocarbons (as C <sub>6</sub> H <sub>6</sub> )	0.1%	max.	Magnesium (Mg)	0.05	ppm max.
Sulfur Compounds (S)	0.001%	max.	Manganese (Mn)	0.01	ppm max.
Aluminium (Al)	0.2	ppm max.	Nickel (Ni)	0.01	ppm max.
Barium (Ba)	0.05	ppm max.	Tin (Sn)	0.05	ppm max.
Boron (B)	0.01	ppm max.	Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1078-G500ML	Amber Glass	500 ML
RP1078-G1L	Amber Glass	1 Litre
RP1078-G2.5L	Amber Glass	2.5 Litre
RP1078-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
RP1078-M20L	Metal	20 Litre
RP1078-M25L	Metal	25 Litre
RP1078-M200L	Metal	200 Litre



### n-Heptane 95%, HPLC

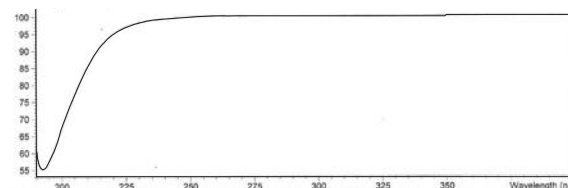
Code LC1078

#### Specifications

Assay (by GC.)	95.0%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	95%	min.
220 nm	80%	min.
210 nm	60%	min.

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1078-G500ML	Amber Glass	500 ML
LC1078-G1L	Amber Glass	1 Litre

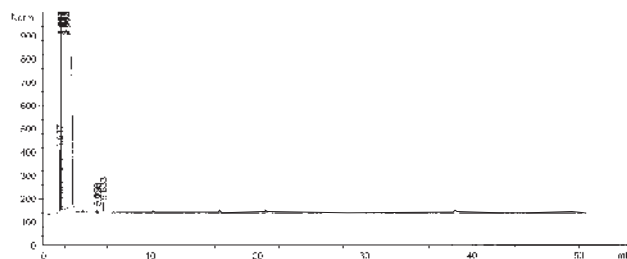
Cat No.	Package	Size
LC1078-G2.5L	Amber Glass	2.5 Litre
LC1078-G4L	Amber Glass	4 Litre

### n-Heptane 95%, Pesticide

Code PC1078

#### Specifications

Assay (by GC.)	95.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	ng/L



Cat No.	Package	Size
PC1078-G500ML	Amber Glass	500 ML
PC1078-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1078-G2.5L	Amber Glass	2.5 Litre
PC1078-G4L	Amber Glass	4 Litre

### n-Heptane 95%, LV-GC

Code LV1078

#### Specifications

Assay (by GC.)	95.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	pg/ml max.
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1078-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1078-G2.5L	Amber Glass	2.5 Litre



## n-Heptane 97%, AR

Code AR1079

### Specifications

Assay (by GC.)	97.0%	min.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.001%	max.
Sulfur Compounds (S)	0.001%	max.

Cat No.	Package	Size
AR1079-G500ML	Amber Glass	500 ML
AR1079-G1L	Amber Glass	1 Litre
AR1079-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1079-G4L	Amber Glass	4 Litre
AR1079-M20L	Metal	20 Litre

## n-Heptane 97%, RCI Premium

Code RP1079

### Specifications

Assay (by GC.)	97.0%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Aromatic hydrocarbons (as C <sub>6</sub> H <sub>6</sub> )	0.1%	max.
Sulfur Compounds (S)	0.001%	max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.

(Meet USP/NF)

Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1079-G500ML	Amber Glass	500 ML
RP1079-G1L	Amber Glass	1 Litre
RP1079-G2.5L	Amber Glass	2.5 Litre
RP1079-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
RP1079-M20L	Metal	20 Litre
RP1079-M25L	Metal	25 Litre
RP1079-M200L	Metal	200 Litre

## n-Heptane 99%, AR

Code AR1080

### Specifications

Assay (by GC.)	99.0%	min.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.001%	max.
Sulfur Compounds (S)	0.001%	max.

Cat No.	Package	Size
AR1080-G500ML	Amber Glass	500 ML
AR1080-G1L	Amber Glass	1 Litre
AR1080-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1080-G4L	Amber Glass	4 Litre
AR1080-M20L	Metal	20 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

### n-Heptane 99%, RCI Premium

Code RP1080

#### Specifications

(Meet USP/NF)

Assay (by GC.)	99.0%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Aromatic hydrocarbons (as C <sub>6</sub> H <sub>6</sub> )	0.1%	max.
Readily carbonizable substance	Passes test	
Sulfur Compounds (S)	0.001%	max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.

Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1080-G500ML	Amber Glass	500 ML
RP1080-G1L	Amber Glass	1 Litre
RP1080-G2.5L	Amber Glass	2.5 Litre
RP1080-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
RP1080-M20L	Metal	20 Litre
RP1080-M25L	Metal	25 Litre
RP1080-M200L	Metal	200 Litre

### n-Heptane 99%, UV-IR

Code IR1080

#### Specifications

Assay (by GC.)	99.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
250 nm	98%	min.

230 nm	90%	min.
220 nm	80%	min.
210 nm	50%	min.
200 nm	10%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1080-G500ML	Amber Glass	500 ML
IR1080-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1080-G2.5L	Amber Glass	2.5 Litre
IR1080-G4L	Amber Glass	4 Litre

### n-Heptane 99%, Anhydrous (50 ppm)

Code AH1081

#### Specifications

Assay (by GC.)	99.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.005%	max.

Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.

Cat No.	Package	Size
AH1081-G500ML	Amber Glass	500 ML
AH1081-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1081-G2.5L	Amber Glass	2.5 Litre
AH1081-G4L	Amber Glass	4 Litre

## n-Heptane 99%, HPLC

Code LC1080

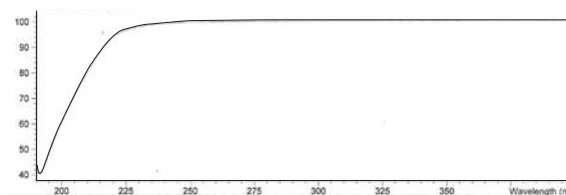
### Specifications

Assay (by GC.)	99.0%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	95%	min.
220 nm	80%	min.
210 nm	60%	min.

Cat No.	Package	Size
LC1080-G500ML	Amber Glass	500 ML
LC1080-G1L	Amber Glass	1 Litre

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1080-G2.5L	Amber Glass	2.5 Litre
LC1080-G4L	Amber Glass	4 Litre

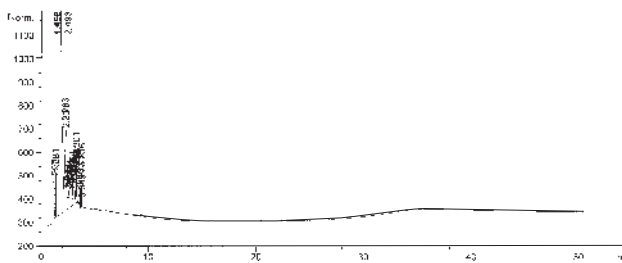
## n-Heptane 99%, Pesticide

Code PC1080

### Specifications

Assay (by GC.)	99.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	ng/L

Cat No.	Package	Size
PC1080-G500ML	Amber Glass	500 ML
PC1080-G1L	Amber Glass	1 Litre



Cat No.	Package	Size
PC1080-G2.5L	Amber Glass	2.5 Litre
PC1080-G4L	Amber Glass	4 Litre

## n-Heptane 99%, LV-GC

Code LV1080

### Specifications

Assay (by GC.)	95.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.

Cat No.	Package	Size
LV1080-G1L	Amber Glass	1 Litre

Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	pg/ml max.
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1080-G2.5L	Amber Glass	2.5 Litre

## HEPTANE FRACTION



CH <sub>3</sub> (CH <sub>2</sub> ) <sub>5</sub> CH <sub>3</sub>	FW. 100.21	Density 1 L =	0.680-0.690 Kg.
CAS-No.	142-82-5	Melting Point	-90.5 °C
UN No.	1206	Boiling Point	97-98 °C
EC No.	205-563-8	EC-Index-No	601-008-00-2
Class:	3	Packaging Group:	II
GHS: H225, H304, H315, H336, H410; P210, P233, P240, P241, P242, P243, P261, P264, P271, P273, P280, P301 + P310, P302 + P352, P303 + P361 + P353, P304 + P340, P312, P331, P332 + P313, P362+P364, P391, P370 + P378, P403 + P235, P405			



### Heptane Fraction, HPLC

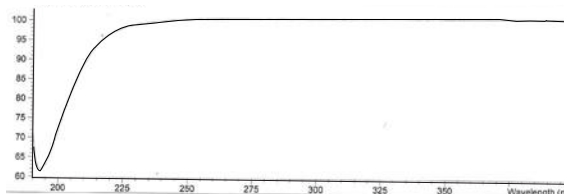
Code LC1082

#### Specifications

Assay (by GC.)	85.0%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	95%	min.
220 nm	80%	min.
210 nm	60%	min.

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1082-G1L	Amber Glass	1 Litre
LC1082-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
LC1082-G4L	Amber Glass	4 Litre

## n-HEXANE



CH <sub>3</sub> (CH <sub>2</sub> ) <sub>4</sub> CH <sub>3</sub>	FW. 86.18	Density 1 L =	0.660 Kg.
CAS-No.	110-54-3	Melting Point	-94.3 °C
UN No.	1208	Boiling Point	69 °C
EC No.	203-777-6	EC-Index-No	601-037-00-0
Class:	3	Packaging Group:	II
GHS: H225, H304, H315, H336, H361f, H373, H411; P201, P202, P210, P233, P240, P241, P242, P243, P260, P264, P271, P273, P280, P281, P301 + P310, P302 + P352, P303 + P361 + P353, P304 + P340, P308 + P313, P312, P314, P331, P332 + P313, P362+P364, P370 + P378, P391, P403 + P235, P405			



### n-Hexane 95%, AR

Code AR1083

#### Specifications

Assay (by GC.)	95.0%	min.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.001%	max.
Sulfur Compounds (S)	0.001%	max.

Cat No.	Package	Size
AR1083-G500ML	Amber Glass	500 ML
AR1083-G1L	Amber Glass	1 Litre
AR1083-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1083-G4L	Amber Glass	4 Litre
AR1083-M20L	Metal	20 Litre

## n-Hexane 95%, RCI Premium

Code RP1083

### Specifications

Assay (by GC.)	95.0%	min.
Assay (by GC.: Total C6 Isomers)	98.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.001%	max.
Aromatic hydrocarbons (as C <sub>6</sub> H <sub>6</sub> )	0.01%	max.
Readily carbonizable substance	Passes test	
Sulfur Compounds (S)	0.001%	max.
Thiophene	Passes test	
UV Transmission Levels (%T)		
420 - 260 nm	97%	min.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.

Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1083-G500ML	Amber Glass	500 ML
RP1083-G1L	Amber Glass	1 Litre
RP1083-G2.5L	Amber Glass	2.5 Litre
RP1083-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
RP1083-M20L	Metal	20 Litre
RP1083-M25L	Metal	25 Litre
RP1083-M200L	Metal	200 Litre

## n-Hexane 95%, HPLC

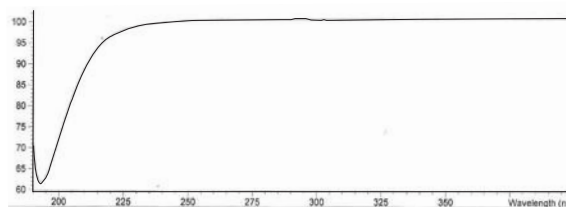
Code LC1083

### Specifications

Assay (by GC.)	95.0%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
240 nm	99%	min.
230 nm	98%	min.
220 nm	90%	min.
210 nm	70%	min.
200 nm	50%	min.

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1083-G500ML	Amber Glass	500 ML
LC1083-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1083-G2.5L	Amber Glass	2.5 Litre
LC1083-G4L	Amber Glass	4 Litre

A  
B  
C  
D  
E  
F  
G  
**H**  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**n-Hexane 95%, HPLC Plus**

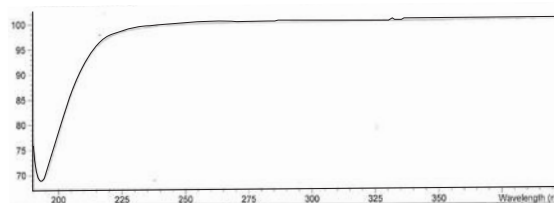
Code LC1084

**Specifications**

Assay (by GC.)	95.0%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
240 nm	99%	min.
230 nm	98%	min.
220 nm	90%	min.
210 nm	70%	min.
200 nm	50%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.

at 365 nm	1	ppb max.
Silicone oil	Free	
DOP	Free	
Amide	Free	

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1084-G500ML	Amber Glass	500 ML
LC1084-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1084-G2.5L	Amber Glass	2.5 Litre
LC1084-G4L	Amber Glass	4 Litre

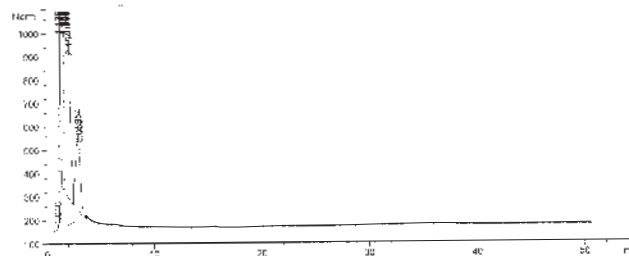
**n-Hexane 95%, Pesticide**

Code PC1083

**Specifications**

Assay (n-Hexane)	95.0%	min.
Assay (Total C <sub>6</sub> Isomers)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	ng/L

Total isomers: n-Hexane, Methylpentane, Methylcyclopentane and Dimethylbutane.



Cat No.	Package	Size
PC1083-G500ML	Amber Glass	500 ML
PC1083-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1083-G2.5L	Amber Glass	2.5 Litre
PC1083-G4L	Amber Glass	4 Litre

## n-Hexane 95%, LV-GC

Code LV1083

### Specifications

Assay (n-Hexane)	95.0%	min.
Assay (Total C <sub>6</sub> Isomers)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.

Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard)	10	pg/ml max.
Single impurity peak		
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Total isomers : n-Hexane , Methylpentane , Methylcyclopentane and Dimethylbutane.

Cat No.	Package	Size
LV1083-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1083-G2.5L	Amber Glass	2.5 Litre

## n-Hexane 99%, AR

Code AR1085

### Specifications

Assay (by GC.)	99.0%	min.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.001%	max.
Sulfur Compounds (S)	0.001%	max.

Cat No.	Package	Size
AR1085-G500ML	Amber Glass	500 ML
AR1085-G1L	Amber Glass	1 Litre
AR1085-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1085-G4L	Amber Glass	4 Litre
AR1085-M20L	Metal	20 Litre

## n-Hexane 99%, RCI Premium

Code RP1085

### Specifications

Assay (by GC.)	99.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.001%	max.
Aromatic hydrocarbons (as C <sub>6</sub> H <sub>6</sub> )	0.01%	max.
Sulfur Compounds (S)	0.001%	max.
Thiophene	Passes test	
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.

Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1085-G500ML	Amber Glass	500 ML
RP1085-G1L	Amber Glass	1 Litre
RP1085-G2.5L	Amber Glass	2.5 Litre
RP1085-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
RP1085-M20L	Metal	20 Litre
RP1085-M25L	Metal	25 Litre
RP1085-M200L	Metal	200 Litre



A  
B  
C  
D  
E  
F  
G  
**H**  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**n-Hexane 99%, UV-IR**

Code IR1085

**Specifications**

Assay (by GC.)	99.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
250 nm	98%	min.

240 nm	95%	min.
220 nm	85%	min.
210 nm	60%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1085-G500ML	Amber Glass	500 ML
IR1085-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1085-G2.5L	Amber Glass	2.5 Litre
IR1085-G4L	Amber Glass	4 Litre

**n-Hexane 99%, Anhydrous (50 ppm)**

Code AH1087

**Specifications**

Assay (by GC.)	99.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.005%	max.

Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.

Cat No.	Package	Size
AH1087-G500ML	Amber Glass	500 ML
AH1087-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1087-G2.5L	Amber Glass	2.5 Litre
AH1087-G4L	Amber Glass	4 Litre



## n-Hexane 99%, HPLC

Code LC1085

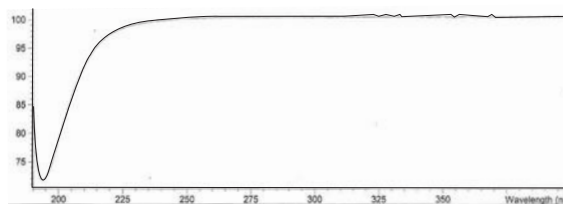
### Specifications

Assay (by GC.)	99.0%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
240 nm	99%	min.
230 nm	98%	min.
220 nm	90%	min.
210 nm	70%	min.
200 nm	50%	min.

Cat No.	Package	Size
LC1085-G500ML	Amber Glass	500 ML
LC1085-G1L	Amber Glass	1 Litre

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1085-G2.5L	Amber Glass	2.5 Litre
LC1085-G4L	Amber Glass	4 Litre

## n-Hexane 99%, HPLC Plus

Code LC1086

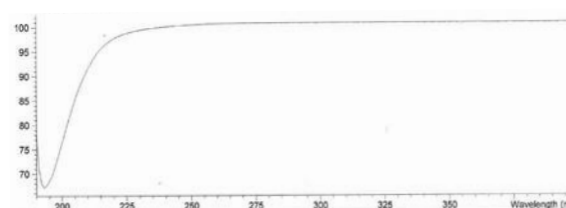
### Specifications

Assay (by GC.)	99.0%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
240 nm	99%	min.
230 nm	98%	min.
220 nm	90%	min.
210 nm	70%	min.
200 nm	50%	min.

Cat No.	Package	Size
LC1086-G500ML	Amber Glass	500 ML
LC1086-G1L	Amber Glass	1 Litre

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.
Silicone oil	Free	
DOP	Free	
Amide	Free	

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1086-G2.5L	Amber Glass	2.5 Litre
LC1086-G4L	Amber Glass	4 Litre

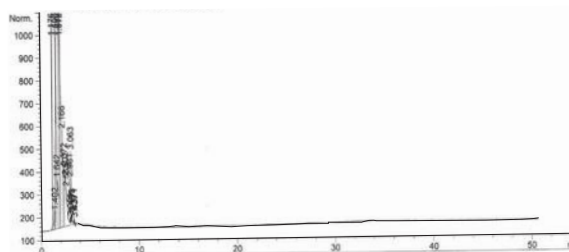
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**n-Hexane 99%, Pesticide**

Code PC1085

**Specifications**

Assay (by GC.)	99.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	ng/L



Cat No.	Package	Size
PC1085-G500ML	Amber Glass	500 ML
PC1085-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1085-G2.5L	Amber Glass	2.5 Litre
PC1085-G4L	Amber Glass	4 Litre

**n-Hexane 99%, LV-GC**

Code LV1085

**Specifications**

Assay (by GC.)	99.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	pg/ml max.
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1085-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1085-G2.5L	Amber Glass	2.5 Litre

**Hexane Fraction, AR**

Code AR1088

**Specifications**

Assay (by GC.)	45.0%	min.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.001%	max.
Sulfur Compounds (S)	0.001%	max.

Cat No.	Package	Size
AR1088-G500ML	Amber Glass	500 ML
AR1088-G1L	Amber Glass	1 Litre
AR1088-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1088-G4L	Amber Glass	4 Litre
AR1088-M20L	Metal	20 Litre



## Hexane Fraction, RCI Premium

Code RP1088

## Specifications

Assay (by GC.: n-Hexane)	45.0%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Sulfur Compounds (S)	0.001%	max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.

Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1088-G500ML	Amber Glass	500 ML
RP1088-G1L	Amber Glass	1 Litre
RP1088-G2.5L	Amber Glass	2.5 Litre
RP1088-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
RP1088-M20L	Metal	20 Litre
RP1088-M25L	Metal	25 Litre
RP1088-M200L	Metal	200 Litre

## Hexane Fraction, HPLC

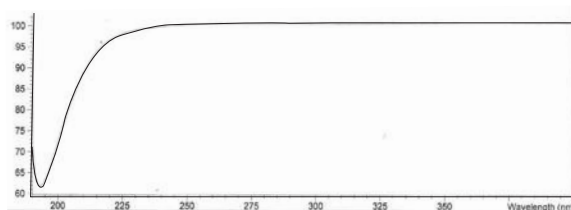
Code LC1088

## Specifications

Assay (by GC.)	45.0%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	95%	min.
220 nm	80%	min.
210 nm	60%	min.

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1088-G500ML	Amber Glass	500 ML
LC1088-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1088-G2.5L	Amber Glass	2.5 Litre
LC1088-G4L	Amber Glass	4 Litre

## Hexanes, AR

Code AR1090

## Specifications

Assay (by GC.: Total C6 Isomers)	99.0%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.001%	max.

(Meet A.C.S. Specifications)

Sulfur Compounds (S)	0.005%	max.
Thiophene	Passes test	

Total Isomers: n-Hexane, Methylpentane, Methylcyclopentane and Dimethylbutane.

Cat No.	Package	Size
AR1090-G500ML	Amber Glass	500 ML
AR1090-G1L	Amber Glass	1 Litre
AR1090-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1090-G4L	Amber Glass	4 Litre
AR1090-M20L	Metal	20 Litre

## Hexanes, RCI Premium

Code RP1090

### Specifications

Assay (by GC.: Total C6 Isomers)	99.0%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
Aromatic hydrocarbons (as C <sub>6</sub> H <sub>6</sub> )	0.01%	max.
Sulfur Compounds (S)	0.001%	max.
Thiophene	Passes test	
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.

Cat No.	Package	Size
RP1090-G500ML	Amber Glass	500 ML
RP1090-G1L	Amber Glass	1 Litre
RP1090-G2.5L	Amber Glass	2.5 Litre
RP1090-G4L	Amber Glass	4 Litre

### (Meet A.C.S. Specifications)

Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Total Isomers: n-Hexane, Methylpentane, Methylcyclopentane and Dimethylbutane.

Cat No.	Package	Size
RP1090-M20L	Metal	20 Litre
RP1090-M25L	Metal	25 Litre
RP1090-M200L	Metal	200 Litre

## Hexanes, HPLC

Code LC1090

### Specifications

Assay (by GC.: Total C <sub>6</sub> Isomers)	99.5%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
240 nm	99%	min.
230 nm	98%	min.
220 nm	90%	min.
210 nm	70%	min.
200 nm	50%	min.

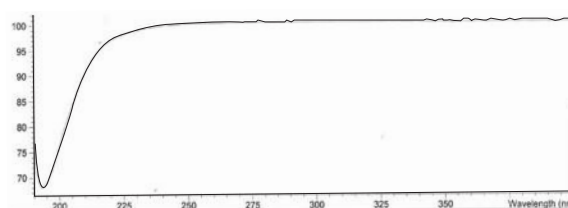
Cat No.	Package	Size
LC1090-G500ML	Amber Glass	500 ML
LC1090-G1L	Amber Glass	1 Litre

### Fluorescence (as quinine)

at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Total isomers: n-Hexane, Methylpentane, Methylcyclopentane and Dimethylbutane.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1090-G2.5L	Amber Glass	2.5 Litre
LC1090-G4L	Amber Glass	4 Litre

## Hexanes, HPLC Plus

Code LC1226

## Specifications

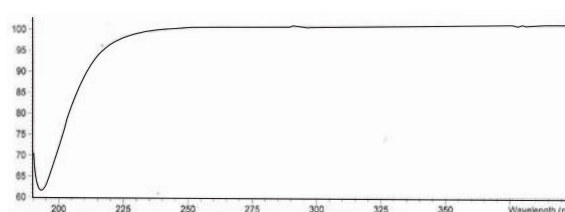
Assay (by GC.: Total C <sub>6</sub> Isomers)	99.5%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
240 nm	99%	min.
230 nm	98%	min.
220 nm	90%	min.
210 nm	70%	min.
200 nm	50%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Cat No.	Package	Size
LC1226-G500ML	Amber Glass	500 ML
LC1226-G1L	Amber Glass	1 Litre

Silicone oil	Free
DOP	Free
Amide	Free

Total isomers: n-Hexane, Methylpentane, Methylcyclopentane and Dimethylbutane.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1226-G2.5L	Amber Glass	2.5 Litre
LC1226-G4L	Amber Glass	4 Litre

## Hexanes, SDF Low Chloride

Code XP1101

## Specifications

Assay (by GC.: Total C <sub>6</sub> Isomers)	99.5%	min.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.0005%	max.
Chloride (Cl)	0.02	ppm max.
Sulfur Compounds (S)	0.001%	max.
Thiophene	Passes test	

Cat No.	Package	Size
XP1101-G500ML	Amber Glass	500 ML
XP1101-G1L	Amber Glass	1 Litre
XP1101-G2.5L	Amber Glass	2.5 Litre

Silicone oil	Free
DOP	Free
Amide	Free

Total isomers: n-Hexane, Methylpentane, Methylcyclopentane and Dimethylbutane.

Cat No.	Package	Size
XP1101-G4L	Amber Glass	4 Litre
XP1101-M20L	Metal	20 Litre

## Hexanes, SDF

Code XP1100

## Specifications

Assay (by GC.: Total C <sub>6</sub> Isomers)	99.5%	min.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.0005%	max.
Sulfur Compounds (S)	0.001%	max.
Thiophene	Passes test	

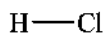
Cat No.	Package	Size
XP1100-G500ML	Amber Glass	500 ML
XP1100-G1L	Amber Glass	1 Litre
XP1100-G2.5L	Amber Glass	2.5 Litre

Silicone oil	Free
DOP	Free
Amide	Free

Total isomers: n-Hexane, Methylpentane, Methylcyclopentane and Dimethylbutane.

Cat No.	Package	Size
XP1100-G4L	Amber Glass	4 Litre
XP1100-M20L	Metal	20 Litre

## HYDROCHLORIC ACID 0.1N-1.0N



HCl	FW. 36.46		
CAS-No.	7647-01-0		
UN No.	1789		
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	III
GHS:	H290; P234, P390, P406		

### Hydrochloric acid, 0.1N Code GN1108

#### Specifications

Appearance	Clear, colorless solution	Normality	0.1000N ± 0.0005N
------------	---------------------------	-----------	-------------------

Traceable to NIST

Cat No.	Package	Size
GN1108-P1L	Plastic	1 Litre
GN1108-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
GN1108-P4L	Plastic	4 Litre
GN1108-P20L	Plastic	20 Litre

### Hydrochloric acid, 0.2N Code GN1109

#### Specifications

Appearance	Clear, colorless solution	Normality	0.2000N ± 0.0005N
------------	---------------------------	-----------	-------------------

Traceable to NIST

Cat No.	Package	Size
GN1109-P1L	Plastic	1 Litre
GN1109-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
GN1109-P4L	Plastic	4 Litre
GN1109-P20L	Plastic	20 Litre

### Hydrochloric acid, 0.5N Code GN1110

#### Specifications

Appearance	Clear, colorless solution	Normality	0.5000N ± 0.0005N
------------	---------------------------	-----------	-------------------

Traceable to NIST

Cat No.	Package	Size
GN1110-P1L	Plastic	1 Litre
GN1110-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
GN1110-P4L	Plastic	4 Litre
GN1110-P20L	Plastic	20 Litre





## Hydrochloric acid, 1.0N

Code GN1111

### Specifications

Appearance Clear, colorless solution

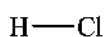
Normality 1.000N ± 0.005N

Traceable to NIST

Cat No.	Package	Size
GN1111-P1L	Plastic	1 Litre
GN1111-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
GN1111-P4L	Plastic	4 Litre
GN1111-P20L	Plastic	20 Litre

## HYDROCHLORIC ACID 4.0 N



HCl FW. 36.46  
 CAS-No. 7647-01-0  
 UN No. 1789  
 EC No. 231-595-7  
 Class: 8  
 GHS: H290, H315, H319, H335; P234, P261, P264, P271, P280, P302 + P352, P304 + P340, P305 + P351 + P338, P312, P332 + P313, P337 + P313, P362+P364, P390, P403 + P233, P405, P406

EC-Index-No 017-002-01-X  
 Packaging Group: III



## Hydrochloric acid, 4.0N

Code GN1112

### Specifications

Appearance Clear, colorless solution

Normality 4.000N ± 0.005N

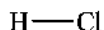
Traceable to NIST

Cat No.	Package	Size
GN1112-P1L	Plastic	1 Litre
GN1112-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
GN1112-P4L	Plastic	4 Litre
GN1112-P20L	Plastic	20 Litre



## HYDROCHLORIC ACID 3%



HCl	FW. 36.46	Density 1 L =	1.02 Kg.
CAS-No.	7647-01-0		
UN No.	1789		
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	III
GHS:	H290; P234, P390, P406		



### Hydrochloric Acid 3%, AR

Code AR1301

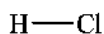
#### Specifications

Assay (by acidimetry)	3%	min.	Sulfite (SO <sub>3</sub> )	0.5	ppm max.
Appearance	Passes test		Heavy metals (as Pb)	0.1	ppm max.
Color (APHA)	10	max.	Arsenic (As)	0.01	ppm max.
Residue after Ignition	3.0	ppm max.	Cadmium (Cd)	0.005	ppm max.
Ammonium (NH <sub>4</sub> )	0.5	ppm max.	Iron (Fe)	0.1	ppm max.
Free Chlorine (Cl)	0.5	ppm max.	Lead (Pb)	0.005	ppm max.
Bromide (Br)	0.5	ppm max.	Zinc (Zn)	0.01	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.			

Cat No.	Package	Size
AR1301-G500ML	Amber Glass	500 ML
AR1301-G1L	Amber Glass	1 Litre
AR1301-G2.5L	Amber Glass	2.5 Litre
AR1301-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1301-G4L	Amber Glass	4 Litre
AR1301-P4L	Plastic	4 Litre
AR1301-P20L	Plastic	20 Litre
AR1301-P200L	Plastic	200 Litre

## HYDROCHLORIC ACID 4%



HCl	FW. 36.46	Density 1 L =	1.02 Kg.
CAS-No.	7647-01-0		
UN No.	1789		
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	III
GHS:	H290; P234, P390, P406		



### Hydrochloric Acid 4%, AR

Code AR1269

#### Specifications

Assay (by acidimetry)	4%	min.	Sulfite (SO <sub>3</sub> )	0.5	ppm max.
Appearance	Passes test		Heavy metals (as Pb)	0.1	ppm max.
Color (APHA)	10	max.	Arsenic (As)	0.01	ppm max.
Residue after Ignition	3.0	ppm max.	Cadmium (Cd)	0.005	ppm max.
Ammonium (NH <sub>4</sub> )	0.5	ppm max.	Iron (Fe)	0.1	ppm max.
Free Chlorine (Cl)	0.5	ppm max.	Lead (Pb)	0.005	ppm max.
Bromide (Br)	0.5	ppm max.	Zinc (Zn)	0.01	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.			

Cat No.	Package	Size
AR1269-P20L	Plastic	20 Litre

## HYDROCHLORIC ACID 5%



HCl	FW. 36.46	Density 1 L =	1.03 Kg.
CAS-No.	7647-01-0		
UN No.	1789		
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	III
GHS:	H290; P234, P390, P406		



### Hydrochloric Acid 5%, AR

Code AR1102

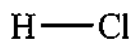
#### Specifications

Assay (by acidimetry)	5.0%	min.	Sulfite (SO <sub>3</sub> )	0.5	ppm max.
Appearance	Passes test		Heavy metals (as Pb)	0.1	ppm max.
Color (APHA)	10	max.	Arsenic (As)	0.01	ppm max.
Residue after Ignition	3.0	ppm max.	Cadmium (Cd)	0.005	ppm max.
Ammonium (NH <sub>4</sub> )	0.5	ppm max.	Iron (Fe)	0.1	ppm max.
Free Chlorine (Cl)	0.5	ppm max.	Lead (Pb)	0.005	ppm max.
Bromide (Br)	0.5	ppm max.	Zinc (Zn)	0.01	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.			

Cat No.	Package	Size
AR1102-G500ML	Amber Glass	500 ML
AR1102-G1L	Amber Glass	1 Litre
AR1102-G2.5L	Amber Glass	2.5 Litre
AR1102-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1102-G4L	Amber Glass	4 Litre
AR1102-P4L	Plastic	4 Litre
AR1102-P20L	Plastic	20 Litre
AR1102-P200L	Plastic	200 Litre

## HYDROCHLORIC ACID 6%



HCl	FW. 36.46	Density 1 L =	1.03 Kg.
CAS-No.	7647-01-0		
UN No.	1789		
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	III
GHS:	H290; P234, P390, P406		

### Hydrochloric Acid 6%, Semig

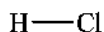
Code SM1415

#### Specifications

Assay (by acidimetry)	6%	min.	Boron (B)	0.1	ppm max.
Appearance	Passes test		Calcium (Ca)	0.2	ppm max.
Color (APHA)	10	max.	Chromium (Cr)	0.1	ppm max.
Residue after Ignition	3	ppm max.	Copper (Cu)	0.05	ppm max.
Ammonium (NH <sub>4</sub> )	0.5	ppm max.	Gold (Au)	0.2	ppm max.
Free Chlorine (Cl)	0.5	ppm max.	Iron (Fe)	0.1	ppm max.
Bromide (Br)	5	ppm max.	Lead (Pb)	0.005	ppm max.
Phosphate (PO <sub>4</sub> )	0.05	ppm max.	Magnesium (Mg)	0.3	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.	Manganese (Mn)	0.2	ppm max.
Sulfite (SO <sub>3</sub> )	0.5	ppm max.	Nickel (Ni)	0.03	ppm max.
Extractable Organic Substance	5	ppm max.	Potassium (K)	0.3	ppm max.
Heavy metals (as Pb)	0.1	ppm max.	Sodium (Na)	0.3	ppm max.
Aluminium (Al)	0.2	ppm max.	Tin (Sn)	0.1	ppm max.
Antimony (Sb)	0.005	ppm max.	Titanium (Ti)	0.1	ppm max.
Arsenic (As)	0.005	ppm max.	Zinc (Zn)	0.01	ppm max.

Cat No.	Package	Size
SM1415-P20L	Plastic	20 Litre

## HYDROCHLORIC ACID 7.5%



HCl	FW. 36.46	Density 1 L =	1.04 Kg.
CAS-No.	7647-01-0		
UN No.	1789		
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	III
GHS:	H290; P234, P390, P406		



### Hydrochloric Acid 7.5%, AR

Code AR1103

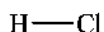
#### Specifications

Assay (by acidimetry)	7.5%	min.	Sulfite (SO <sub>3</sub> )	0.5	ppm max.
Appearance	Passes test		Heavy metals (as Pb)	0.1	ppm max.
Color (APHA)	10	max.	Arsenic (As)	0.01	ppm max.
Residue after Ignition	3.0	ppm max.	Cadmium (Cd)	0.005	ppm max.
Ammonium (NH <sub>4</sub> )	0.5	ppm max.	Iron (Fe)	0.1	ppm max.
Free Chlorine (Cl)	0.5	ppm max.	Lead (Pb)	0.005	ppm max.
Bromide (Br)	0.5	ppm max.	Zinc (Zn)	0.01	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.			

Cat No.	Package	Size
AR1103-G500ML	Amber Glass	500 ML
AR1103-G1L	Amber Glass	1 Litre
AR1103-G2.5L	Amber Glass	2.5 Litre
AR1103-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1103-G4L	Amber Glass	4 Litre
AR1103-P4L	Plastic	4 Litre
AR1103-P20L	Plastic	20 Litre
AR1103-P200L	Plastic	200 Litre

## HYDROCHLORIC ACID 9%



HCl	FW. 36.46	Density 1 L =	1.04 Kg.
CAS-No.	7647-01-0		
UN No.	1789		
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	III
GHS:	H290; P234, P390, P406		



### Hydrochloric Acid 9%, AR

Code AR1320

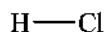
#### Specifications

Assay (by acidimetry)	9%	min.	Bromide (Br)	1.0	ppm max.
Appearance	Passes test		Sulfate (SO <sub>4</sub> )	1.0	ppm max.
Color (APHA)	10	max.	Sulfite (SO <sub>3</sub> )	1.0	ppm max.
Residue after Ignition	5.0	ppm max.	Heavy metals (as Pb)	1.0	ppm max.
Ammonium (NH <sub>4</sub> )	3.0	ppm max.	Arsenic (As)	0.01	ppm max.
Free Chlorine (Cl)	1.0	ppm max.	Iron (Fe)	0.2	ppm max.

Cat No.	Package	Size
AR1320-G500ML	Amber Glass	500 ML
AR1320-G1L	Amber Glass	1 Litre
AR1320-G2.5L	Amber Glass	2.5 Litre
AR1320-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1320-G4L	Amber Glass	4 Litre
AR1320-P4L	Plastic	4 Litre
AR1320-P20L	Plastic	20 Litre
AR1320-P200L	Plastic	200 Litre

## HYDROCHLORIC ACID 10%



HCl	FW. 36.46	Density 1 L =	1.05 Kg.
CAS-No.	7647-01-0	Melting Point	-15 °C
UN No.	1789	Boiling Point	102 °C
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	III
GHS:	H290, H315, H319, H335; P234, P261, P264, P271, P280, P302 + P352, P304 + P340, P305 + P351 + P338, P312, P332 + P313, P337 + P313, P362+P364, P390, P403 + P233, P405, P406		



### Hydrochloric Acid 10%, AR

Code AR1260

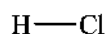
#### Specifications

Assay (by acidimetry)	10%	min.
Appearance	Passes test	
Color (APHA)	10	max.
Residue after Ignition	5.0	ppm max.
Ammonium (NH <sub>4</sub> )	3.0	ppm max.
Free Chlorine (Cl)	1.0	ppm max.

Bromide (Br)	1.0	ppm max.
Sulfate (SO <sub>4</sub> )	1.0	ppm max.
Sulfite (SO <sub>3</sub> )	1.0	ppm max.
Heavy metals (as Pb)	1.0	ppm max.
Arsenic (As)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.

Cat No.	Package	Size
AR1260-P10L	Plastic	10 Litre

## HYDROCHLORIC ACID 18%



HCl	FW. 36.46	Density 1 L =	1.09 Kg.
CAS-No.	7647-01-0	Melting Point	-59 °C
UN No.	1789	Boiling Point	108 °C
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	III
GHS:	H290, H315, H319, H335; P234, P261, P264, P271, P280, P302 + P352, P304 + P340, P305 + P351 + P338, P312, P332 + P313, P337 + P313, P362+P364, P390, P403 + P233, P405, P406		



### Hydrochloric Acid 18%, AR

Code AR1127

#### Specifications

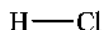
Assay (by acidimetry)	18%	min.
Appearance	Passes test	
Color (APHA)	10	max.
Residue after Ignition	5.0	ppm max.
Ammonium (NH <sub>4</sub> )	3.0	ppm max.
Free Chlorine (Cl)	1.0	ppm max.

Bromide (Br)	1.0	ppm max.
Sulfate (SO <sub>4</sub> )	1.0	ppm max.
Sulfite (SO <sub>3</sub> )	1.0	ppm max.
Heavy metals (as Pb)	1.0	ppm max.
Arsenic (As)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.

Cat No.	Package	Size
AR1127-G500ML	Amber Glass	500 ML
AR1127-G1L	Amber Glass	1 Litre
AR1127-G2.5L	Amber Glass	2.5 Litre
AR1127-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1127-G4L	Amber Glass	4 Litre
AR1127-P4L	Plastic	4 Litre
AR1127-P20L	Plastic	20 Litre
AR1127-P200L	Plastic	200 Litre

## HYDROCHLORIC ACID 20%



HCl	FW. 36.46	Density 1 L =	1.09 Kg.
CAS-No.	7647-01-0	Melting Point	-59 °C
UN No.	1789	Boiling Point	108 °C
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	III
GHS:	H290, H315, H319, H335; P234, P261, P264, P271, P280, P302 + P352, P304 + P340, P305 + P351 + P338, P312, P332 + P313, P337 + P313, P362+P364, P390, P403 + P233, P405, P406		



### Hydrochloric Acid 20%, AR

Code AR1229

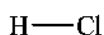
#### Specifications

Assay (by acidimetry)	20±1%	Bromide (Br)	1.0	ppm max.
Appearance	Passes test	Sulfate (SO <sub>4</sub> )	1.0	ppm max.
Color (APHA)	10 max.	Sulfite (SO <sub>3</sub> )	1.0	ppm max.
Residue after Ignition	5.0 ppm max.	Heavy metals (as Pb)	1.0	ppm max.
Ammonium (NH <sub>4</sub> )	3.0 ppm max.	Arsenic (As)	0.01	ppm max.
Free Chlorine (Cl)	1.0 ppm max.	Iron (Fe)	0.2	ppm max.

Cat No.	Package	Size
AR1229-G500ML	Amber Glass	500 ML
AR1229-G1L	Amber Glass	1 Litre
AR1229-G2.5L	Amber Glass	2.5 Litre
AR1229-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1229-G4L	Amber Glass	4 Litre
AR1229-P4L	Plastic	4 Litre
AR1229-P20L	Plastic	20 Litre
AR1229-P200L	Plastic	200 Litre

## HYDROCHLORIC ACID 25%



HCl	FW. 36.46	Density 1 L =	1.12 Kg.
CAS-No.	7647-01-0	Melting Point	-55 °C
UN No.	1789	Boiling Point	107 °C
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	II
GHS:	H290, H314, H335; P234, P260, P264, P271, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P312, P363, P390, P403 + P233, P405, P406		



### Hydrochloric Acid 25%, AR

Code AR1270

#### Specifications

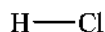
(Meets British Pharmacopoeia)

Assay (by acidimetry)	25% min.	Bromide (Br)	1.0	ppm max.
Appearance	Passes test	Sulfate (SO <sub>4</sub> )	1.0	ppm max.
Color (APHA)	10 max.	Sulfite (SO <sub>3</sub> )	1.0	ppm max.
Residue after Ignition	5.0 ppm max.	Heavy metals (as Pb)	1.0	ppm max.
Ammonium (NH <sub>4</sub> )	3.0 ppm max.	Arsenic (As)	0.01	ppm max.
Free Chlorine (Cl)	1.0 ppm max.	Iron (Fe)	0.2	ppm max.

Cat No.	Package	Size
AR1270-G500ML	Amber Glass	500 ML
AR1270-G1L	Amber Glass	1 Litre
AR1270-G2.5L	Amber Glass	2.5 Litre
AR1270-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1270-G4L	Amber Glass	4 Litre
AR1270-P4L	Plastic	4 Litre
AR1270-P20L	Plastic	20 Litre
AR1270-P200L	Plastic	200 Litre

## HYDROCHLORIC ACID 30%



HCl	FW. 36.46	Density 1 L =	1.15 Kg.
CAS-No.	7647-01-0	Melting Point	-50 °C
UN No.	1789	Boiling Point	90 °C
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	II
GHS:	H290, H314, H335; P234, P260, P264, P271, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P312, P363, P390, P403 + P233, P405, P406		



### Hydrochloric Acid 30%, AR

Code AR1076

#### Specifications

Assay (by acidimetry)	30%	min.
Appearance	Passes test	
Color (APHA)	10	max.
Residue after Ignition	5.0	ppm max.
Ammonium (NH <sub>4</sub> )	3.0	ppm max.
Free Chlorine (Cl)	1.0	ppm max.

Bromide (Br)	1.0	ppm max.
Sulfate (SO <sub>4</sub> )	1.0	ppm max.
Sulfite (SO <sub>3</sub> )	1.0	ppm max.
Heavy metals (as Pb)	1.0	ppm max.
Arsenic (As)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.

Cat No.	Package	Size
AR1076-G500ML	Amber Glass	500 ML
AR1076-G1L	Amber Glass	1 Litre
AR1076-G2.5L	Amber Glass	2.5 Litre
AR1076-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1076-G4L	Amber Glass	4 Litre
AR1076-P4L	Plastic	4 Litre
AR1076-P20L	Plastic	20 Litre
AR1076-P200L	Plastic	200 Litre

## HYDROCHLORIC ACID 32%



HCl	FW. 36.46	Density 1 L =	1.16 Kg.
CAS-No.	7647-01-0	Melting Point	-40 °C
UN No.	1789	Boiling Point	85 °C
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	II
GHS:	H290, H314, H335; P234, P260, P264, P271, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P312, P363, P390, P403 + P233, P405, P406		



### Hydrochloric Acid 32%, AR

Code AR1104

#### Specifications

Assay (by acidimetry)	32%	min.
Appearance	Passes test	
Color (APHA)	10	max.
Residue after Ignition	5.0	ppm max.
Ammonium (NH <sub>4</sub> )	3.0	ppm max.
Free Chlorine (Cl)	1.0	ppm max.

Bromide (Br)	1.0	ppm max.
Sulfate (SO <sub>4</sub> )	1.0	ppm max.
Sulfite (SO <sub>3</sub> )	1.0	ppm max.
Heavy metals (as Pb)	1.0	ppm max.
Arsenic (As)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.

Cat No.	Package	Size
AR1104-G500ML	Amber Glass	500 ML
AR1104-G1L	Amber Glass	1 Litre
AR1104-G2.5L	Amber Glass	2.5 Litre
AR1104-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1104-G4L	Amber Glass	4 Litre
AR1104-P4L	Plastic	4 Litre
AR1104-P20L	Plastic	20 Litre
AR1104-P200L	Plastic	200 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**Hydrochloric Acid 32%, RCI Premium** Code RP1104

Specifications		
Assay (by acidimetry)	32%	min.
Appearance of solution	Passes test	
Color (APHA)	10	max.
Residue after ignition	0.0003%	max.
Extractable Organic Substance	0.0005%	max.
Free Chlorine (as Cl)	0.0001%	max.
Ammonium (NH <sub>4</sub> )	0.0001%	max.
Bromide (Br)	0.001%	max.
Phosphate (PO <sub>4</sub> )	0.00005%	max.
Sulfate (SO <sub>4</sub> )	0.00005%	max.
Sulfite (SO <sub>3</sub> )	0.00008%	max.
Aluminium (Al)	0.00001%	max.
Heavy metal (as Pb)	0.00001%	max.
Arsenic and Antimony (as As)	0.0000005%	max.
Barium (Ba)	0.00002%	max.
Boron (B)	0.000005%	max.
Cadmium (Cd)	0.000001%	max.
Calcium (Ca)	0.00003%	max.
Chromium (Cr)	0.00001%	max.
Cobalt (Co)	0.000001%	max.
Copper (Cu)	0.000002%	max.
Gold (Au)	0.00001%	max.
Iron (Fe)	0.00001%	max.
Lead (Pb)	0.000001%	max.
Magnesium (Mg)	0.00003%	max.
Manganese (Mn)	0.000002%	max.
Mercury (Hg)	0.0000005%	max.
Molybdenum (Mo)	0.000002%	max.
Nickel (Ni)	0.000005%	max.
Potassium (K)	0.00003%	max.
Sodium (Na)	0.00003%	max.
Strontium (Sr)	0.000002%	max.
Tin (Sn)	0.00003%	max.
Titanium (Ti)	0.00001%	max.
Zinc (Zn)	0.000002%	max.

Cat No.	Package	Size
RP1104-G500ML	Amber Glass	500 ML
RP1104-G1L	Amber Glass	1 Litre
RP1104-G2.5L	Amber Glass	2.5 Litre
RP1104-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
RP1104-G4L	Amber Glass	4 Litre
RP1104-P4L	Plastic	4 Litre
RP1104-P20L	Plastic	20 Litre
RP1104-P200L	Plastic	200 Litre

**HYDROCHLORIC ACID 35%**

H—Cl	HCl	FW. 36.46	Density 1 L =	1.17 Kg.
	CAS-No.	7647-01-0	Melting Point	-30 °C
	UN No.	1789	Boiling Point	61 °C
	EC No.	231-595-7	EC-Index-No	017-002-01-X
	Class:	8	Packaging Group:	II
	GHS:	H290, H314, H335; P234, P260, P264, P271, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P312, P363, P390, P403 + P233, P405, P406		



**Hydrochloric Acid 35%, AR** Code AR1105

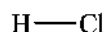
Specifications		
Assay (by acidimetry)	35%	min.
Appearance	Passes test	
Color (APHA)	10	max.
Residue after Ignition	5.0	ppm max.
Ammonium (NH <sub>4</sub> )	3.0	ppm max.
Free Chlorine (Cl)	1.0	ppm max.
Bromide (Br)	1.0	ppm max.
Sulfate (SO <sub>4</sub> )	1.0	ppm max.
Sulfite (SO <sub>3</sub> )	1.0	ppm max.
Heavy metals (as Pb)	1.0	ppm max.
Arsenic (As)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.

Cat No.	Package	Size
AR1105-G500ML	Amber Glass	500 ML
AR1105-G1L	Amber Glass	1 Litre
AR1105-G2.5L	Amber Glass	2.5 Litre
AR1105-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1105-G4L	Amber Glass	4 Litre
AR1105-P4L	Plastic	4 Litre
AR1105-P20L	Plastic	20 Litre
AR1105-P200L	Plastic	200 Litre



## HYDROCHLORIC ACID 36%



HCl	FW. 36.46	Density 1 L =	1.18 Kg.
CAS-No.	7647-01-0	Melting Point	-30 °C
UN No.	1789	Boiling Point	61 °C
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	II
GHS:	H290, H314, H335; P234, P260, P264, P271, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P312, P363, P390, P403 + P233, P405, P406		



### Hydrochloric Acid 36%, AR

Code AR1106

#### Specifications

Assay (by acidimetry)	36%	min.	Sulfite (SO <sub>3</sub> )	1.0	ppm max.
Appearance	Passes test		Heavy metals (as Pb)	1.0	ppm max.
Color (APHA)	10	max.	Arsenic (As)	0.01	ppm max.
Residue after Ignition	5.0	ppm max.	Cadmium (Cd)	0.01	ppm max.
Ammonium (NH <sub>4</sub> )	3.0	ppm max.	Iron (Fe)	0.2	ppm max.
Free Chlorine (Cl)	1.0	ppm max.	Lead (Pb)	0.01	ppm max.
Bromide (Br)	1.0	ppm max.	Zinc (Zn)	0.02	ppm max.
Sulfate (SO <sub>4</sub> )	1.0	ppm max.			

Cat No.	Package	Size
AR1106-G500ML	Amber Glass	500 ML
AR1106-G1L	Amber Glass	1 Litre
AR1106-G2.5L	Amber Glass	2.5 Litre
AR1106-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1106-G4L	Amber Glass	4 Litre
AR1106-P4L	Plastic	4 Litre
AR1106-P20L	Plastic	20 Litre
AR1106-P200L	Plastic	200 Litre

### Hydrochloric Acid 36%, RCI Premium

Code RP1106

#### Specifications

(Meet A.C.S. Specifications)

Assay (by acidimetry)	36.5 - 38.0%	Chromium (Cr)	0.1	ppm max.	
Appearance of solution	Passes test	Cobalt (Co)	0.01	ppm max.	
Color (APHA)	10	max.	Copper (Cu)	0.02	ppm max.
Residue after ignition	3	ppm max.	Gold (Au)	0.1	ppm max.
Extractable Organic Substance	5	ppm max.	Iron (Fe)	0.1	ppm max.
Free Chlorine (as Cl)	1	ppm max.	Lead (Pb)	0.01	ppm max.
Ammonium (NH <sub>4</sub> )	1	ppm max.	Magnesium (Mg)	0.3	ppm max.
Bromide (Br)	10	ppm max.	Manganese (Mn)	0.02	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.	Mercury (Hg)	0.005	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.	Molybdenum (Mo)	0.02	ppm max.
Sulfite (SO <sub>3</sub> )	0.8	ppm max.	Nickel (Ni)	0.05	ppm max.
Aluminium (Al)	0.1	ppm max.	Potassium (K)	0.3	ppm max.
Heavy metal (as Pb)	0.1	ppm max.	Sodium (Na)	0.3	ppm max.
Arsenic and Antimony (as As)	0.005	ppm max.	Strontium (Sr)	0.02	ppm max.
Barium (Ba)	0.2	ppm max.	Tin (Sn)	0.3	ppm max.
Boron (B)	0.05	ppm max.	Titanium (Ti)	0.1	ppm max.
Cadmium (Cd)	0.01	ppm max.	Zinc (Zn)	0.02	ppm max.
Calcium (Ca)	0.3	ppm max.			

Cat No.	Package	Size
RP1106-G500ML	Amber Glass	500 ML
RP1106-G1L	Amber Glass	1 Litre
RP1106-G2.5L	Amber Glass	2.5 Litre
RP1106-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
RP1106-G4L	Amber Glass	4 Litre
RP1106-P4L	Plastic	4 Litre
RP1106-P20L	Plastic	20 Litre
RP1106-P200L	Plastic	200 Litre

## HYDROCHLORIC ACID 37%



HCl	FW. 36.46	Density 1 L =	1.19 Kg.
CAS-No.	7647-01-0	Melting Point	-30 °C
UN No.	1789	Boiling Point	51 °C
EC No.	231-595-7	EC-Index-No	017-002-01-X
Class:	8	Packaging Group:	II
GHS:	H290, H314, H335; P234, P260, P264, P271, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P312, P363, P390, P403 + P233, P405, P406		



### Hydrochloric Acid 37%, Pharma

Code BP1107

#### Specifications

(Meet Ph.Eur, BP, USP)

Assay (by acidimetry)	37%	min.
Appearance	Clear and Colorless	
Solubility	Passes test	
Color (APHA)	10	max.
Residue on Evaporation	0.005%	max.
Ammonium (NH <sub>4</sub> )	3.0	ppm max.
Free Chlorine (Cl)	1.0	ppm max.
Bromide (Br)	1.0	ppm max.

Sulfate (SO <sub>4</sub> )	1.0	ppm max.
Sulfite (SO <sub>3</sub> )	1.0	ppm max.
Heavy metals (as Pb)	1.0	ppm max.
Arsenic (As)	0.01	ppm max.
Cadmium (Cd)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.
Lead (Pb)	0.01	ppm max.
Zinc (Zn)	0.02	ppm max.

Cat No.	Package	Size
BP1107-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
BP1107-G4L	Amber Glass	4 Litre

### Hydrochloric Acid 37%, AR

Code AR1107

#### Specifications

Assay (by acidimetry)	37%	min.
Appearance	Passes test	
Color (APHA)	10	max.
Residue after Ignition	5.0	ppm max.
Ammonium (NH <sub>4</sub> )	3.0	ppm max.
Free Chlorine (Cl)	1.0	ppm max.
Bromide (Br)	1.0	ppm max.
Sulfate (SO <sub>4</sub> )	1.0	ppm max.

Sulfite (SO <sub>3</sub> )	1.0	ppm max.
Heavy metals (as Pb)	1.0	ppm max.
Arsenic (As)	0.01	ppm max.
Cadmium (Cd)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.
Lead (Pb)	0.01	ppm max.
Zinc (Zn)	0.02	ppm max.

Cat No.	Package	Size
AR1107-G500ML	Amber Glass	500 ML
AR1107-G1L	Amber Glass	1 Litre
AR1107-G2.5L	Amber Glass	2.5 Litre
AR1107-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1107-G4L	Amber Glass	4 Litre
AR1107-P4L	Plastic	4 Litre
AR1107-P20L	Plastic	20 Litre
AR1107-P200L	Plastic	200 Litre



## Hydrochloric Acid 37%, RCI Premium

Code RP1107

### Specifications

(Meet A.C.S. Specifications)

Assay (by acidimetry)	37%	min.
Appearance of solution	Passes test	
Color (APHA)	10	max.
Residue after ignition	3	ppm max.
Extractable Organic Substance	5	ppm max.
Free Chlorine (as Cl)	1	ppm max.
Ammonium (NH <sub>4</sub> )	1	ppm max.
Bromide (Br)	10	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Sulfite (SO <sub>3</sub> )	0.8	ppm max.
Aluminium (Al)	0.1	ppm max.
Heavy metal (as Pb)	0.1	ppm max.
Arsenic and Antimony (as As)	0.005	ppm max.
Barium (Ba)	0.2	ppm max.
Boron (B)	0.05	ppm max.
Cadmium (Cd)	0.01	ppm max.
Calcium (Ca)	0.2	ppm max.

Chromium (Cr)	0.1	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.02	ppm max.
Gold (Au)	0.1	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.01	ppm max.
Magnesium (Mg)	0.3	ppm max.
Manganese (Mn)	0.02	ppm max.
Mercury (Hg)	0.005	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.05	ppm max.
Potassium (K)	0.3	ppm max.
Sodium (Na)	0.3	ppm max.
Strontium (Sr)	0.02	ppm max.
Tin (Sn)	0.3	ppm max.
Titanium (Ti)	0.1	ppm max.
Zinc (Zn)	0.02	ppm max.

Cat No.	Package	Size
RP1107-G500ML	Amber Glass	500 ML
RP1107-G1L	Amber Glass	1 Litre
RP1107-G2.5L	Amber Glass	2.5 Litre
RP1107-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
RP1107-G4L	Amber Glass	4 Litre
RP1107-P4L	Plastic	4 Litre
RP1107-P20L	Plastic	20 Litre
RP1107-P200L	Plastic	200 Litre

## Hydrochloric Acid 37%, Semig

Code SM1107

### Specifications

Assay (by acidimetry)	36.5 - 38.0%
Appearance	Passes test
Color (APHA)	10 max.
Residue after Ignition	3 ppm max.
Ammonium (NH <sub>4</sub> )	1 ppm max.
Free Chlorine (Cl)	1 ppm max.
Bromide (Br)	10 ppm max.
Phosphate (PO <sub>4</sub> )	0.05 ppm max.
Sulfate (SO <sub>4</sub> )	0.5 ppm max.
Sulfite (SO <sub>3</sub> )	0.8 ppm max.
Extractable Organic Substance	5 ppm max.
Heavy metals (as Pb)	0.1 ppm max.
Aluminium (Al)	0.3 ppm max.
Antimony (Sb)	0.005 ppm max.
Arsenic (As)	0.005 ppm max.

Boron (B)	0.1 ppm max.
Calcium (Ca)	0.3 ppm max.
Chromium (Cr)	0.1 ppm max.
Copper (Cu)	0.05 ppm max.
Gold (Au)	0.3 ppm max.
Iron (Fe)	0.2 ppm max.
Lead (Pb)	0.1 ppm max.
Magnesium (Mg)	0.3 ppm max.
Manganese (Mn)	0.3 ppm max.
Nickel (Ni)	0.03 ppm max.
Potassium (K)	0.3 ppm max.
Sodium (Na)	0.3 ppm max.
Tin (Sn)	0.3 ppm max.
Titanium (Ti)	0.1 ppm max.
Zinc (Zn)	0.1 ppm max.

Cat No.	Package	Size
SM1107-G500ML	Amber Glass	500 ML
SM1107-G1L	Amber Glass	1 Litre
SM1107-G2.5L	Amber Glass	2.5 Litre
SM1107-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1107-G4L	Amber Glass	4 Litre
SM1107-P4L	Plastic	4 Litre
SM1107-P20L	Plastic	20 Litre

A  
B  
C  
D  
E  
F  
G  
**H**  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Hydrochloric Acid 37%, Electropure

Code EP1107

### Specifications

Assay (by acidimetry)	36.5 - 38.0%	
Appearance	Passes test	
Color (APHA)	10	max.
Residue after Ignition	5	ppm max.
Free Chlorine (Cl)	0.5	ppm max.
Ammonium (NH <sub>4</sub> )	2	ppm max.
Bromide (Br)	10	ppm max.
Phosphate (PO <sub>4</sub> )	0.2	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Sulfite (SO <sub>3</sub> )	1	ppm max.
Aluminium (Al)	0.05	ppm max.
Antimony (Sb)	0.01	ppm max.
Arsenic (As)	0.01	ppm max.
Barium (Ba)	0.05	ppm max.
Beryllium (Be)	0.01	ppm max.
Bismuth (Bi)	0.05	ppm max.
Boron (B)	0.05	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.05	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.05	ppm max.

Gallium (Ga)	0.02	ppm max.
Gold (Au)	0.05	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.2	ppm max.
Lead (Pb)	0.02	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.05	ppm max.
Nickel (Ni)	0.02	ppm max.
Platinum (Pt)	0.1	ppm max.
Potassium (K)	0.1	ppm max.
Silver (Ag)	0.02	ppm max.
Sodium (Na)	0.3	ppm max.
Strontium (Sr)	0.05	ppm max.
Thallium (Tl)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Titanium (Ti)	0.1	ppm max.
Vanadium (V)	0.05	ppm max.
Zinc (Zn)	0.1	ppm max.
Zirconium (Zr)	0.05	ppm max.

Cat No.	Package	Size
EP1107-G500ML	Amber Glass	500 ML
EP1107-G1L	Amber Glass	1 Litre
EP1107-G2.5L	Amber Glass	2.5 Litre
EP1107-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
EP1107-G4L	Amber Glass	4 Litre
EP1107-P4L	Plastic	4 Litre
EP1107-P20L	Plastic	20 Litre



## Specifications

Assay (by acidimetry)	36.5 - 38.0%
Appearance	Passes test
Color (APHA)	10 max.
Residue after Ignition	2 ppm max.
Ammonium (NH <sub>4</sub> )	1 ppm max.
Free Chlorine (Cl)	0.5 ppm max.
Bromide (Br)	10 ppm max.
Phosphate (PO <sub>4</sub> )	0.05 ppm max.
Sulfate (SO <sub>4</sub> )	0.5 ppm max.
Sulfite (SO <sub>3</sub> )	0.5 ppm max.
Aluminium (Al)	20 ppb max.
Antimony (Sb)	1 ppb max.
Arsenic (As)	1 ppb max.
Barium (Ba)	5 ppb max.
Beryllium (Be)	1 ppb max.
Bismuth (Bi)	5 ppb max.
Boron (B)	10 ppb max.
Cadmium (Cd)	1 ppb max.
Calcium (Ca)	50 ppb max.
Chromium (Cr)	1 ppb max.
Cobalt (Co)	1 ppb max.
Copper (Cu)	1 ppb max.
Gallium (Ga)	1 ppb max.

Gold (Au)	1	ppb max.
Indium (In)	1	ppb max.
Iron (Fe)	50	ppb max.
Lead (Pb)	5	ppb max.
Lithium (Li)	1	ppb max.
Magnesium (Mg)	20	ppb max.
Manganese (Mn)	5	ppb max.
Molybdenum (Mo)	1	ppb max.
Nickel (Ni)	1	ppb max.
Platinum (Pt)	1	ppb max.
Potassium (K)	20	ppb max.
Silver (Ag)	5	ppb max.
Sodium (Na)	50	ppb max.
Strontium (Sr)	1	ppb max.
Thallium (Tl)	1	ppb max.
Tin (Sn)	5	ppb max.
Titanium (Ti)	10	ppb max.
Vanadium (V)	10	ppb max.
Zinc (Zn)	20	ppb max.
Zirconium (Zr)	1	ppb max.
Particle/ml		
0.5 µm and greater	250	max.
1.0 µm and greater	10	max.

Cat No.	Package	Size
VL1107-G500ML	Amber Glass	500 ML
VL1107-G1L	Amber Glass	1 Litre
VL1107-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
VL1107-P2.5L	Plastic	2.5 Litre
VL1107-G4L	Amber Glass	4 Litre
VL1107-P4L	Plastic	4 Litre



## HYDROFLUORIC ACID 49%

HF	FW. 20.01	Density 1 L =	1.15 Kg.
CAS-No.	7664-39-3	Melting Point	- 36 °C
		Boiling Point	106 °C

### Hydrofluoric Acid 49%, AR

Code AR1337

#### Specifications

Assay	48.5 - 49.5%	
Color (APHA)	10	max.
Fluosilicic acid (H <sub>2</sub> SiF <sub>6</sub> )	100	ppm max.
Residue after Ignition	5	ppm max.
Chloride (Cl)	5	ppm max.
Phosphate (PO <sub>4</sub> )	1	ppm max.
Sulfate and Sulfite (as SO <sub>4</sub> )	5	ppm max.
Heavy metals (as Pb)	500	ppb max.
Aluminium (Al)	100	ppb max.
Arsenic (As)	50	ppb max.
Barium (Ba)	50	ppb max.
Beryllium (Be)	20	ppb max.
Bismuth (Bi)	50	ppb max.
Boron (B)	50	ppb max.
Cadmium (Cd)	20	ppb max.
Calcium (Ca)	500	ppb max.
Chromium (Cr)	20	ppb max.
Cobalt (Co)	50	ppb max.
Copper (Cu)	50	ppb max.

Iron (Fe)	300	ppb max.
Lead (Pb)	50	ppb max.
Lithium (Li)	50	ppb max.
Magnesium (Mg)	200	ppb max.
Manganese (Mn)	50	ppb max.
Molybdenum (Mo)	50	ppb max.
Nickel (Ni)	50	ppb max.
Potassium (K)	100	ppb max.
Silver (Ag)	50	ppb max.
Sodium (Na)	200	ppb max.
Strontium (Sr)	50	ppb max.
Tantalum (Ta)	10	ppb max.
Thallium (Tl)	20	ppb max.
Tin (Sn)	50	ppb max.
Titanium (Ti)	100	ppb max.
Vanadium (V)	50	ppb max.
Zinc (Zn)	100	ppb max.
Zirconium (Zr)	50	ppb max.

Cat No.	Package	Size
AR1337-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1337-P4L	Plastic	4 Litre





## Hydrofluoric Acid 49%, Electropure

Code EP1337

### Specifications

Assay	48.5 - 49.5%	
Color (APHA)	10	max.
Fluosilicic acid (H <sub>2</sub> SiF <sub>6</sub> )	50	ppm max.
Residue after Ignition	5	ppm max.
Chloride (Cl)	5	ppm max.
Nitrate (NO <sub>3</sub> )	3	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.
Sulfate and Sulfite (as SO <sub>4</sub> )	1	ppm max.
Heavy metals (as Pb)	100	ppb max.
Aluminium (Al)	50	ppb max.
Arsenic and Antimony (as As)	10	ppb max.
Barium (Ba)	10	ppb max.
Beryllium (Be)	10	ppb max.
Bismuth (Bi)	20	ppb max.
Boron (B)	10	ppb max.
Cadmium (Cd)	10	ppb max.
Calcium (Ca)	100	ppb max.
Chromium (Cr)	10	ppb max.
Cobalt (Co)	10	ppb max.
Copper (Cu)	10	ppb max.
Gallium (Ga)	10	ppb max.
Germanium (Ge)	20	ppb max.
Gold (Au)	10	ppb max.

Iron (Fe)	100	ppb max.
Lead (Pb)	10	ppb max.
Lithium (Li)	10	ppb max.
Magnesium (Mg)	100	ppb max.
Manganese (Mn)	10	ppb max.
Molybdenum (Mo)	10	ppb max.
Nickel (Ni)	10	ppb max.
Niobium (Nb)	10	ppb max.
Potassium (K)	20	ppb max.
Silicon (Si)	1000	ppb max.
Silver (Ag)	10	ppb max.
Sodium (Na)	50	ppb max.
Strontium (Sr)	10	ppb max.
Tantalum (Ta)	10	ppb max.
Thallium (Tl)	10	ppb max.
Tin (Sn)	20	ppb max.
Titanium (Ti)	50	ppb max.
Vanadium (V)	10	ppb max.
Zinc (Zn)	20	ppb max.
Zirconium (Zr)	10	ppb max.
Particle/ml		
0.5 µm and greater	100	max.

Cat No.	Package	Size
EP1337-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
EP1337-P4L	Plastic	4 Litre

## HYDROGEN PEROXIDE SOLUTION 50%



H<sub>2</sub>O<sub>2</sub> FW. 34.01  
 CAS-No. 7722-84-1  
 UN No. 2014  
 EC No. 231-765-0  
 Class: 5.1 (8)

Density 1 L = 1.19 Kg.  
 Melting Point -52 °C  
 Boiling Point 114 °C  
 EC-Index-No 008-003-00-9  
 Packaging Group: II



GHS: H272, H302 + H332, H314, H335, H412; P210, P220, P221, P260, P264, P270, P271, P273, P280, P301 + P312, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P330, P363, P403 + P233, P405

## Hydrogen Peroxide 50% Solution, AR

Code AR1275

### Specifications

Assay (by titration)	50.0%	min.
Color (APHA)	10	max.
Residue on Evaporation	0.005%	max.
Chloride (Cl)	0.0005%	max.
Sulfate (SO <sub>4</sub> )	0.0005%	max.
Heavy metal (as Pb)	0.0001%	max.
Chromium (Cr)	0.05	ppm max.

Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.01	ppm max.
Nickel (Ni)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.
Zirconium (Zr)	0.01	ppm max.

Cat No.	Package	Size
AR1275-P20L	Plastic	20 Litre

## IODINE (RESUBLIMED)



I <sub>2</sub>	FW. 253.81	Density 1 L =	4.93 g/cm <sup>3</sup>
CAS-No.	7553-56-2	Melting Point	114 °C
UN No.	3495	Boiling Point	185 °C
EC No.	231-442-4	EC-Index-No	053-001-00-3
Class:	8 (6.1)	Packaging Group:	III
GHS:	H312 + H332, H315, H319, H335, H372, H400; P261, P264, P270, P271, P273, P280, P302 + P352, P304 + P340, P305 + P351 + P338, P312, P332 + P313, P337 + P313, P362+P364, P391, P403 + P233, P405		



### Iodine (Resublimed), AR

Code AR1113

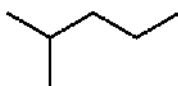
#### Specifications

Description	Grayish-black crystalline flakes /granules with a metallic luster	Non-volatile matter (105 °C)	0.005%	max.
Assay	99.5% min.	Chloride & Bromide (as Cl)	0.005%	max.
Melting Point	About 113 °C	Sulfate (SO <sub>4</sub> )	0.002%	max.

Cat No.	Package	Size
AR1113-G500G	Amber Glass	500 G

Cat No.	Package	Size
AR1113-G1KG	Amber Glass	1 KG

## ISOHEXANE



C <sub>6</sub> H <sub>14</sub>	FW. 86.18	Density 1 L =	0.660 Kg.
CAS-No.	92112-69-1	Melting Point	< -50 °C
UN No.	1208	Boiling Point	53 - 63 °C
EC No.	295-570-2	EC-Index-No	601-007-00-7
Class	3	Packaging Group:	II
GHS:	H225, H304, H315, H336, H411; P210, P233, P240, P241, P242, P243, P261, P264, P271, P273, P280, P301 + P310, P302 + P352, P303 + P361 + P353, P304 + P340, P312, P331, P332 + P313, P362 + P364, P370 + P378, P391, P403 + P235, P405		

### Isohexane, AR

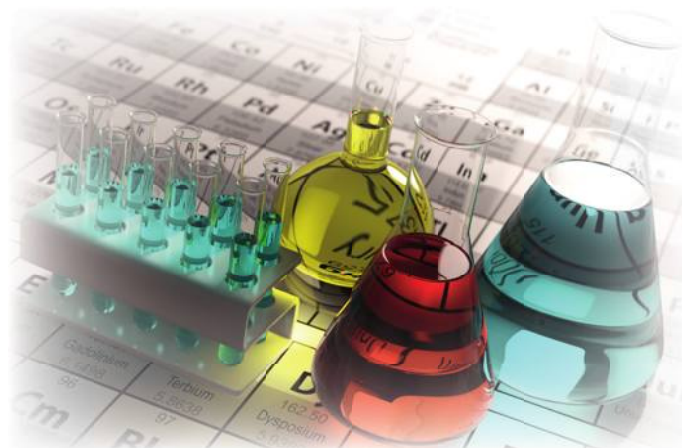
Code AR1394

#### Specifications

Assay (by GC. : Total C6H14 Isomeres)	95.0%	min.	Residue on Evaporation	0.001%	max.
Color (APHA)	20	max.	Total Sulfur	0.0001%	max.
Appearance	Clear and colorless		Benzene	0.01%	max.
Water (by Coulometry)	0.02%	max.			

Cat No.	Package	Size
AR1394-G500ML	Amber Glass	500 ML
AR1394-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AR1394-G2.5L	Amber Glass	2.5 Litre
AR1394-G4L	Amber Glass	4 Litre





## MAGNESIUM CHLORIDE HEXAHYDRATE

<b>MgCl<sub>2</sub>·6H<sub>2</sub>O</b>	MgCl <sub>2</sub> ·6H <sub>2</sub> O	FW. 203.30	Density 1 L =	1.57 g/cm <sup>3</sup>
	CAS-No.	7791-18-6	Melting Point	117 °C
	EC No.	232-094-6	Boiling Point	1412 °C

### Magnesium Chloride Hexahydrate, AR

Code AR1242

#### Specifications

Assay	98.0%	min.	Sulfate (SO <sub>4</sub> )	0.005%	max.
pH of 5% water (25°C)	5.0 - 6.5		Heavy metals (as Pb)	0.0005%	max.
Insoluble in water	0.005%	max.	Barium (Ba)	0.005%	max.
Total Nitrogen (N)	0.005%	max.	Calcium (Ca)	0.05%	max.
Phosphate (PO <sub>4</sub> )	0.001%	max.	Iron (Fe)	0.0005%	max.

Cat No.	Package	Size
AR1242-P500G	Plastic	500 G
AR1242-P5KG	Plastic	5 KG

Cat No.	Package	Size
AR1242-P25KG	Plastic	25 KG

## MAGNESIUM OXIDE

<b>MgO</b>	MgO	FW. 40.30	Density 1 L =	3.58 g/cm <sup>3</sup>
	CAS-No.	1309-48-4	Melting Point	2800 °C
	EC No.	215-171-9	Boiling Point	3600 °C

### Magnesium Oxide, AR

Code AR1244

#### Specifications

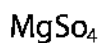
Assay	97.0%	min.	Chloride (Cl)	0.1%	max.
Appearance of Solution	Passes test		Sulfate (SO <sub>4</sub> )	1.0%	max.
Loss on Ignition (900°C)	8.0%	max.	Heavy metals (as Pb)	0.002%	max.
Substances soluble in water	2.0%	max.	Arsenic (As)	0.0003%	max.
Substances insoluble in CH <sub>3</sub> COOH	0.1%	max.	Iron (Fe)	0.05%	max.

Cat No.	Package	Size
AR1244-P500G	Plastic	500 G
AR1244-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1244-P5KG	Plastic	5 KG
AR1244-P25KG	Plastic	25 KG



## MAGNESIUM SULFATE ANHYDROUS



MgSO<sub>4</sub> FW. 120.37  
 CAS-No. 7487-88-9  
 EC No. 231-298-2

Density 1 L = 2.66 g/cm<sup>3</sup>  
 Melting Point 1124 °C

### Magnesium Sulfate Anhydrous, AR

Code AR1308

#### Specifications

Assay (after ignited)	99.0%	min.
pH (3 w/v% sol., 25 °C)	6.0 - 9.0	
Chloride (Cl)	0.001%	max.
Nitrate (NO <sub>3</sub> )	Passes test	
Solubility in water	Passes test	

Arsenic (As)	0.0003%	max.
Calcium (Ca)	0.05%	max.
Iron (Fe)	0.001%	max.
Lead (Pb)	0.001%	max.
Loss on Ignition	3.0%	max.

Cat No.	Package	Size
AR1308-P500G	Plastic	500 G
AR1308-P5KG	Plastic	5 KG

Cat No.	Package	Size
AR1308-P25KG	Plastic	25 KG

## MAGNESIUM SULFATE HEPTAHYDRATE



MgSO<sub>4</sub>·7H<sub>2</sub>O FW. 246.48  
 CAS-No. 10034-99-8  
 EC No. 231-298-2

Density 1 L = 1.68 g/cm<sup>3</sup>  
 Melting Point 1124 °C

### Magnesium Sulfate Heptahydrate, AR

Code AR1114

#### Specifications

Description	Colorless Crystal	
Assay	99.5%	min.
pH (5% Water)	5.0 - 8.0	
Total Nitrogen (N)	0.002%	max.
Chloride (Cl)	0.0005%	max.
Heavy metals (as Pb)	0.0005%	max.

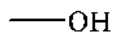
Calcium (Ca)	0.005%	max.
Iron (Fe)	0.0001%	max.
Potassium (K)	0.001%	max.
Manganese (Mn)	0.0005%	max.
Sodium (Na)	0.001%	max.

Cat No.	Package	Size
AR1114-P500G	Plastic	500 G
AR1114-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1114-P5KG	Plastic	5 KG
AR1114-P25KG	Plastic	25 KG



# METHANOL



CH <sub>3</sub> OH	FW. 32.04	Density 1 L =	0.790 Kg.
CAS-No.	67-56-1	Melting Point	-98 °C
UN No.	1230	Boiling Point	64.5 °C
EC No.	200-659-6	EC-Index-No	603-001-00-X
Class:	3 (6.1)	Packaging Group:	II
GHS:	H225, H301 + H311 + H331, H370; P210, P233, P240, P241, P242, P243, P260, P264, P271, P280, P301 + P310, P302 + P352, P303 + P361 + P353, P304 + P340, P308 + P311, P312, P361 + P364, P370 + P378, P403 + P235,		



## Methanol, Pharma

Code BP1115

### Specifications

(Conforms to ACS, Ph.Eur, BP, USP)

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Appearance	Clear, Colorless liquid	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Acidity or alkalinity	Passes test	
Residue on Evaporation	0.0005%	max.
Acetone (GC.)	2	ppm max.
Benzene (GC.)	2	ppm max.
Ethanol (GC.)	2	ppm max.
Acetaldehyde (GC.)	0.001%	max.
Carbonyl Compounds (as CH <sub>3</sub> CHO)	0.001%	max.
Formaldehyde	0.001%	max.
Related substances (GC.)	Passes test	
Readily carbonizable substances	Passes test	
Readily oxidizable substances	Passes test	
Substances reducing permanganate (as O)	Passes test	
Substances darkened by sulfuric acid	Passes test	
Reducing substances	Passes test	
Solubility in water	Passes test	
Chloride (Cl)	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	1.0	ppm max.
Heavy metals (as Pb)	1.0	ppm max.
Aluminium (Al)	0.2	ppm max.
Arsenic (As)	0.02	ppm max.
Barium (Ba)	0.05	ppm max.
Beryllium (Be)	0.02	ppm max.

Bismuth (Bi)	0.02	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Gallium (Ga)	0.02	ppm max.
Gold (Au)	0.02	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.01	ppm max.
Platinum (Pt)	0.05	ppm max.
Silver (Ag)	0.02	ppm max.
Thallium (Tl)	0.02	ppm max.
Tin (Sn)	0.05	ppm max.
Titanium (Ti)	0.02	ppm max.
Vanadium (V)	0.02	ppm max.
Zinc (Zn)	0.05	ppm max.
Zirconium (Zr)	0.02	ppm max.
UV Absorbance		
	290 nm	0.01 AU max.
	270 nm	0.02 AU max.
	250 nm	0.05 AU max.
	230 nm	0.15 AU max.

Cat No.	Package	Size
BP1115-P20L	Plastic	20 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Methanol, AR

Code AR1115

### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0003	max.
Alkalinity (mEq./g.)	0.0002	max.

### (Meet A.C.S. Specifications)

Residue on Evaporation	0.001%	max.
Carbonyl Compounds (as CH <sub>3</sub> CHO)	0.001%	max.
Solubility in water	Passes test	
Substances darkened by sulfuric acid	Passes test	
Substances reducing permanganate	Passes test	

Cat No.	Package	Size
AR1115-G500ML	Amber Glass	500 ML
AR1115-G1L	Amber Glass	1 Litre
AR1115-G2.5L	Amber Glass	2.5 Litre
AR1115-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1115-G4L	Amber Glass	4 Litre
AR1115-P4L	Plastic	4 Litre
AR1115-P20L	Plastic	20 Litre
AR1115-P200L	Plastic	200 Litre

## Methanol, RCI Premium

Code RP1115

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Acetone (GC.)	0.001%	max.
Acetaldehyde (GC.)	0.001%	max.
Benzene (GC.)	0.001%	max.
Ethanol (GC.)	0.05%	max.
Carbonyl Compounds (as CH <sub>3</sub> CHO)	0.001%	max.
Formaldehyde	0.001%	max.
Readily carbonizable substances	Passes test	
Solubility in water	Passes test	
Substances reducing permanganate	Passes test	
Chloride (Cl)	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	1	ppm max.
Aluminium (Al)	0.2	ppm max.
Arsenic (As)	0.02	ppm max.
Barium (Ba)	0.05	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.02	ppm max.

### (Meet A.C.S. Specifications)

Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Gallium (Ga)	0.02	ppm max.
Gold (Au)	0.02	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.01	ppm max.
Platinum (Pt)	0.05	ppm max.
Silver (Ag)	0.02	ppm max.
Thallium (Tl)	0.02	ppm max.
Tin (Sn)	0.05	ppm max.
Titanium (Ti)	0.02	ppm max.
Vanadium (V)	0.02	ppm max.
Zinc (Zn)	0.05	ppm max.
Zirconium (Zr)	0.02	ppm max.

Cat No.	Package	Size
RP1115-G500ML	Amber Glass	500 ML
RP1115-G1L	Amber Glass	1 Litre
RP1115-G2.5L	Amber Glass	2.5 Litre
RP1115-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
RP1115-G4L	Amber Glass	4 Litre
RP1115-P4L	Plastic	4 Litre
RP1115-P20L	Plastic	20 Litre
RP1115-P200L	Plastic	200 Litre

## Methanol, UV-IR

Code IR1115

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Acetone (GC.)	0.001%	max.
UV Transmission Levels (%T)		
260 nm	98%	min.

250 nm	95%	min.
240 nm	90%	min.
230 nm	75%	min.
220 nm	55%	min.
210 nm	30%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1115-G500ML	Amber Glass	500 ML
IR1115-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1115-G2.5L	Amber Glass	2.5 Litre
IR1115-G4L	Amber Glass	4 Litre

## Methanol, Anhydrous (100 ppm)

Code AH1116

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.

Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Acetone (GC.)	0.01%	max.
Ethanol (GC.)	0.1%	max.

Cat No.	Package	Size
AH1116-G500ML	Amber Glass	500 ML
AH1116-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1116-G2.5L	Amber Glass	2.5 Litre
AH1116-G4L	Amber Glass	4 Litre

## Methanol, Anhydrous (50 ppm)

Code AH1118

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.005%	max.
Acidity (mEq./g.)	0.0005	max.

Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Acetone (GC.)	0.01%	max.
Ethanol (GC.)	0.1%	max.

Cat No.	Package	Size
AH1118-G500ML	Amber Glass	500 ML
AH1118-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1118-G2.5L	Amber Glass	2.5 Litre
AH1118-G4L	Amber Glass	4 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**Methanol, Anhydrous (20 ppm)**

Code AH1117

**Specifications**

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.002%	max.
Acidity (mEq./g.)	0.0005	max.

Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Acetone (GC.)	0.01%	max.
Ethanol (GC.)	0.1%	max.

Cat No.	Package	Size
AH1117-G100ML	Amber Glass	100 ML
AH1117-G500ML	Amber Glass	500 ML
AH1117-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1117-G2.5L	Amber Glass	2.5 Litre
AH1117-G4L	Amber Glass	4 Litre

**Methanol, HPLC**

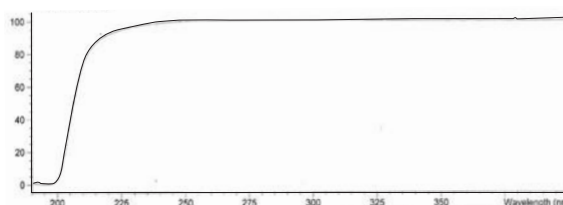
Code LC1115

**Specifications**

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0003	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Acetaldehyde (GC.)	0.001%	max.
Acetone (GC.)	0.001%	max.
Carbonyl Compounds	0.001%	max.
Formaldehyde (GC.)	0.001%	max.
Solubility in water	Passes test	
Substances reducing permanganate	Passes test	
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.

230 nm	80%	min.
220 nm	70%	min.
210 nm	60%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1115-G500ML	Amber Glass	500 ML
LC1115-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1115-G2.5L	Amber Glass	2.5 Litre
LC1115-G4L	Amber Glass	4 Litre



## Methanol, HPLC Plus

Code LC1224

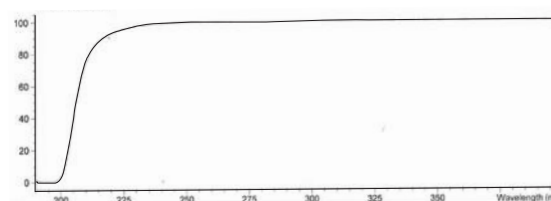
### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0003	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Acetaldehyde (GC.)	0.001%	max.
Acetone (GC.)	0.001%	max.
Carbonyl Compounds	0.001%	max.
Formaldehyde (GC.)	0.001%	max.
Solubility in water	Passes test	
Substances reducing permanganate	Passes test	
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	80%	min.

Cat No.	Package	Size
LC1224-G500ML	Amber Glass	500 ML
LC1224-G1L	Amber Glass	1 Litre

220 nm	70%	min.
210 nm	60%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.
Silicone oil	Free	
DOP	Free	
Amide	Free	

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1224-G2.5L	Amber Glass	2.5 Litre
LC1224-G4L	Amber Glass	4 Litre

## Methanol, Super Gradient for HPLC

Code SG1115

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0003	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0002%	max.
Acetone (GC.)	0.001%	max.
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	90%	min.

Cat No.	Package	Size
SG1115-G500ML	Amber Glass	500 ML
SG1115-G1L	Amber Glass	1 Litre

220 nm	75%	min.
210 nm	65%	min.
Gradient Specification		
at 230 nm	2.0	mAU max.
at 235 nm	2.0	mAU max.
at 254 nm	1.0	mAU max.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	0.5	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
SG1115-G2.5L	Amber Glass	2.5 Litre
SG1115-G4L	Amber Glass	4 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**Methanol, LC-MS**

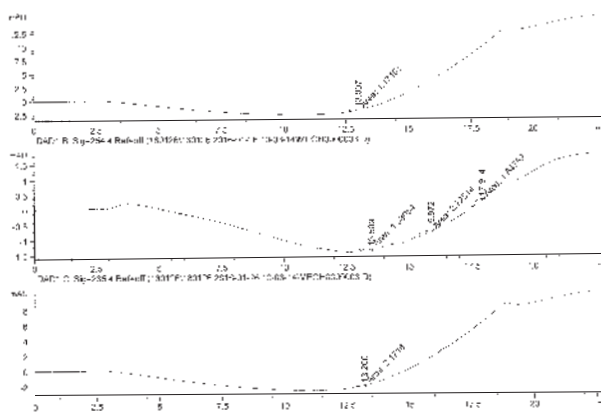
Code LM1115

**Specifications**

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0003	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0001%	max.
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	90%	min.
220 nm	75%	min.
210 nm	65%	min.
Gradient Specification		
at 230 nm	2.0	mAU max.
at 254 nm	1.0	mAU max.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.
Aluminium (Al)	5	ppb max.
Barium (Ba)	5	ppb max.
Cadmium (Cd)	5	ppb max.
Calcium (Ca)	20	ppb max.
Chromium (Cr)	5	ppb max.
Cobalt (Co)	5	ppb max.
Copper (Cu)	5	ppb max.

Iron (Fe)	10	ppb max.
Lead (Pb)	5	ppb max.
Magnesium (Mg)	5	ppb max.
Manganese (Mn)	5	ppb max.
Nickel (Ni)	5	ppb max.
Potassium (K)	5	ppb max.
Sodium (Na)	20	ppb max.
Tin (Sn)	5	ppb max.
Zinc (Zn)	5	ppb max.

Product passed through 0.1 micron final filter and bottled under inert gas.



Cat No.	Package	Size
LM1115-G500ML	Amber Glass	500 ML
LM1115-G1L	Amber Glass	1 Litre

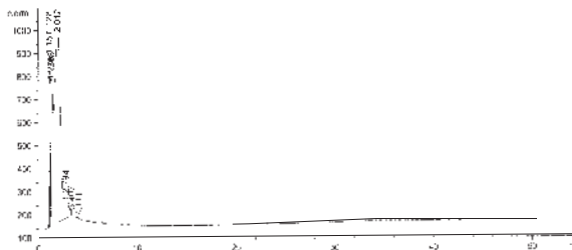
Cat No.	Package	Size
LM1115-G2.5L	Amber Glass	2.5 Litre
LM1115-G4L	Amber Glass	4 Litre

**Methanol, Pesticide**

Code PC1115

**Specifications**

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Acetone (GC.)	0.001%	max.
ECD (as lindane standard) Single impurity peak	10	ng/L



Cat No.	Package	Size
PC1115-G500ML	Amber Glass	500 ML
PC1115-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1115-G2.5L	Amber Glass	2.5 Litre
PC1115-G4L	Amber Glass	4 Litre



## Methanol, Purge and Trap

Code PT1115

## Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0001%	max.
Volatile Organic Compounds	Passes test	
All Aromatics	10	ppb max.
Acetone	50	ppb max.
Methyl Ethyl Ketone	50	ppb max.
Methyl Isoamyl Ketone	50	ppb max.

All other detectable ketones	50	ppb max.
Carbon Tetrachloride	50	ppb max.
Chloroform	50	ppb max.
Dichloromethane	50	ppb max.
All other detectable chlorohydrocarbons	50	ppb max.
Pentane	50	ppb max.
Hexane	50	ppb max.
Heptane	50	ppb max.
2,2,4-Trimethyl Pentane	50	ppb max.
All other detectable alkanes	50	ppb max.
All other detectable peaks (as Hexane)	50	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
PT1115-G500ML	Amber Glass	500 ML
PT1115-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PT1115-G2.5L	Amber Glass	2.5 Litre
PT1115-G4L	Amber Glass	4 Litre

## Methanol, Semig

Code SM1115

## Specifications

Assay (by GC.)	99.9%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity ( $\mu$ Eq./g.)	0.3	max.
Alkalinity ( $\mu$ Eq./g.)	0.1	max.
Carbonyl Compounds	0.003%	max.
Solubility in water	Passes Test	
Residue on Evaporation	5	ppm max.
Chloride (Cl)	0.2	ppm max.
Phosphate ( $PO_4$ )	0.5	ppm max.
Heavy metals (as Pb)	0.5	ppm max.
Aluminium (Al)	0.1	ppm max.
Arsenic and Antimony (as As)	0.01	ppm max.
Boron (B)	0.1	ppm max.
Calcium (Ca)	0.1	ppm max.

Chromium (Cr)	0.1	ppm max.
Copper (Cu)	0.1	ppm max.
Gallium (Ga)	0.1	ppm max.
Gold (Au)	0.1	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.1	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.1	ppm max.
Nickel (Ni)	0.1	ppm max.
Potassium (K)	0.1	ppm max.
Sodium (Na)	0.1	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.1	ppm max.
Zinc (Zn)	0.1	ppm max.

Cat No.	Package	Size
SM1115-G500ML	Amber Glass	500 ML
SM1115-G1L	Amber Glass	1 Litre
SM1115-G2.5L	Amber Glass	2.5 Litre
SM1115-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1115-G4L	Amber Glass	4 Litre
SM1115-P4L	Plastic	4 Litre
SM1115-P20L	Plastic	20 Litre
SM1115-P200L	Plastic	200 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Methanol, Electropure

Code EP1115

### Specifications

Assay (by GC.)	99.9%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (µEq./g.)	0.3	max.
Alkalinity (µEq./g.)	0.5	max.
Residue on Evaporation	5	ppm max.
Solubility in Water	Passes test	
Chloride (Cl)	0.2	ppm max.
Phosphate (PO <sub>4</sub> )	0.1	ppm max.
Heavy metals (as Pb)	100	ppb max.
Aluminium (Al)	50	ppb max.
Arsenic and Antimony (as As)	10	ppb max.
Barium (Ba)	20	ppb max.
Boron (B)	20	ppb max.
Cadmium (Cd)	20	ppb max.
Calcium (Ca)	50	ppb max.
Chromium (Cr)	10	ppb max.
Cobalt (Co)	20	ppb max.

Copper (Cu)	10	ppb max.
Gallium (Ga)	50	ppb max.
Germanium (Ge)	50	ppb max.
Gold (Au)	20	ppb max.
Iron (Fe)	20	ppb max.
Lead (Pb)	20	ppb max.
Lithium (Li)	50	ppb max.
Magnesium (Mg)	20	ppb max.
Manganese (Mn)	10	ppb max.
Nickel (Ni)	10	ppb max.
Potassium (K)	50	ppb max.
Silicon (Si)	50	ppb max.
Silver (Ag)	20	ppb max.
Sodium (Na)	50	ppb max.
Strontium (Sr)	20	ppb max.
Tin (Sn)	50	ppb max.
Titanium (Ti)	20	ppb max.
Zinc (Zn)	50	ppb max.

Cat No.	Package	Size
EP1115-G500ML	Amber Glass	500 ML
EP1115-G1L	Amber Glass	1 Litre
EP1115-G2.5L	Amber Glass	2.5 Litre
EP1115-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
EP1115-G4L	Amber Glass	4 Litre
EP1115-P4L	Plastic	4 Litre
EP1115-P20L	Plastic	20 Litre
EP1115-P200L	Plastic	200 Litre

## Methanol, Extropure

Code XP1115

### Specifications

Assay (by GC.)	99.9%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (µEq./g.)	0.3	max.
Alkalinity (µEq./g.)	0.5	max.
Solubility in water	Passes test	
Residue on Evaporation	5	ppm max.
Chloride (Cl)	0.2	ppm max.
Phosphate (PO <sub>4</sub> )	0.1	ppm max.
Heavy metals (as Pb)	100	ppb max.
Aluminium (Al)	50	ppb max.
Arsenic and Antimony (as As)	10	ppb max.
Barium (Ba)	20	ppb max.
Boron (B)	20	ppb max.
Cadmium (Cd)	20	ppb max.
Calcium (Ca)	50	ppb max.
Chromium (Cr)	20	ppb max.
Cobalt (Co)	20	ppb max.
Copper (Cu)	10	ppb max.
Gallium (Ga)	50	ppb max.

Germanium (Ge)	50	ppb max.
Gold (Au)	20	ppb max.
Iron (Fe)	20	ppb max.
Lead (Pb)	20	ppb max.
Lithium (Li)	50	ppb max.
Magnesium (Mg)	20	ppb max.
Manganese (Mn)	10	ppb max.
Nickel (Ni)	10	ppb max.
Potassium (K)	50	ppb max.
Silicon (Si)	50	ppb max.
Silver (Ag)	20	ppb max.
Sodium (Na)	50	ppb max.
Strontium (Sr)	20	ppb max.
Tin (Sn)	50	ppb max.
Titanium (Ti)	20	ppb max.
Zinc (Zn)	50	ppb max.
Silicone oil	Free	
DOP	Free	
Amide	Free	

Cat No.	Package	Size
XP1115-G500ML	Amber Glass	500 ML
XP1115-G1L	Amber Glass	1 Litre
XP1115-G2.5L	Amber Glass	2.5 Litre
XP1115-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
XP1115-G4L	Amber Glass	4 Litre
XP1115-P4L	Plastic	4 Litre
XP1115-P20L	Plastic	20 Litre
XP1115-P200L	Plastic	200 Litre

## Methanol, VLSI

Code VL1115

## Specifications

Assay (by GC.)	99.9%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity ( $\mu\text{Eq./g.}$ )	0.3	max.
Alkalinity ( $\mu\text{Eq./g.}$ )	0.5	max.
Solubility in Water	Passes test	
Residue on Evaporation	3	ppm max.
Chloride (Cl)	0.1	ppm max.
Phosphate ( $\text{PO}_4$ )	0.1	ppm max.
Heavy metals (as Pb)	0.1	ppm max.
Aluminium (Al)	20	ppb max.
Arsenic and Antimony (as As)	10	ppb max.
Barium (Ba)	20	ppb max.
Boron (B)	20	ppb max.
Cadmium (Cd)	20	ppb max.
Calcium (Ca)	50	ppb max.
Chromium (Cr)	20	ppb max.
Cobalt (Co)	20	ppb max.
Copper (Cu)	10	ppb max.
Gallium (Ga)	20	ppb max.
Germanium (Ge)	20	ppb max.

Gold (Au)	10	ppb max.
Iron (Fe)	20	ppb max.
Lead (Pb)	20	ppb max.
Lithium (Li)	20	ppb max.
Magnesium (Mg)	20	ppb max.
Manganese (Mn)	10	ppb max.
Nickel (Ni)	10	ppb max.
Potassium (K)	20	ppb max.
Silicon (Si)	50	ppb max.
Silver (Ag)	20	ppb max.
Sodium (Na)	50	ppb max.
Strontium (Sr)	20	ppb max.
Tin (Sn)	20	ppb max.
Titanium (Ti)	20	ppb max.
Zinc (Zn)	50	ppb max.
Zirconium (Zr)	20	ppb max.
Particle/ml:		
0.5 $\mu\text{m}$ and greater	30	max.
1.0 $\mu\text{m}$ and greater	8	max.

Product passed through 1 micron final filter.

Cat No.	Package	Size
VL1115-G500ML	Amber Glass	500 ML
VL1115-G1L	Amber Glass	1 Litre
VL1115-G2.5L	Amber Glass	2.5 Litre
VL1115-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
VL1115-G4L	Amber Glass	4 Litre
VL1115-P4L	Plastic	4 Litre
VL1115-P20L	Plastic	20 Litre
VL1115-P200L	Plastic	200 Litre

## Methanol, LV-GC

Code LV1115

## Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.

Residue on Evaporation	0.0003%	max.
Acetone (GC.)	0.001%	max.
ECD (as lindane standard)	10	pg/ml max.
Single impurity peak		
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1115-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1115-G2.5L	Amber Glass	2.5 Litre

## Methanol, Peptide Synthesis

Code PS1115

## Specifications

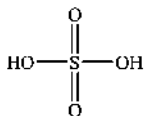
Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.

Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Acetone (GC.)	0.01%	max.
Ethanol (GC.)	0.1%	max.
Free Amines	0.001%	max.

Cat No.	Package	Size
PS1115-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PS1115-G2.5L	Amber Glass	2.5 Litre

## METHANOL 75%



CH<sub>3</sub>OH  
CAS-No.

FW. 32.04  
67-56-1

Density 1 L = 0.872 Kg.

### Methanol 75%, AR

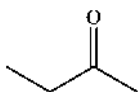
Code AR1357

#### Specifications

Assay (by GC.- correct for water)	75 - 76%	v/v	Residue on Evaporation	0.001%	max.
Appearance	Clear		Carbonyl Compounds (as CH <sub>3</sub> CHO)	0.001%	max.
Color (APHA)	10	max.	Solubility in water	Passes test	
Water (by Coulometry)	24 - 25%	v/v	Substances darkened by sulfuric acid	Passes test	
Acidity (mEq./g.)	0.0003	max.	Substances reducing permanganate	Passes test	
Alkalinity (mEq./g.)	0.0002	max.			

Cat No.	Package	Size
AR1357-P4L	Plastic	4 Litre

## METHYL ETHYL KETONE



C<sub>2</sub>H<sub>5</sub>COCH<sub>3</sub>  
CAS-No.  
UN No.  
EC No.  
Class:

FW. 72.11  
78-93-3  
1193  
201-159-0  
3

Density 1 L = 0.805 Kg.  
Melting Point -86 °C  
Boiling Point 79.6 °C  
EC-Index-No 606-002-00-3  
Packaging Group: II



GHS: H225, H319, H336, EUH066; P210, P233, P240, P241, P242, P243, P261, P264, P271, P280, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P312, P337 + P313, P370 + P378, P403 + P235, P405

### Methyl ethyl ketone, AR

Code AR1122

#### Specifications

Assay (by GC.)	99.5%	min.	Acidity (mEq./g.)	0.0005	max.
Water (by Coulometry)	0.1%	max.	Residue on Evaporation	0.001%	max.

Cat No.	Package	Size	Cat No.	Package	Size
AR1122-G500ML	Amber Glass	500 ML	AR1122-G4L	Amber Glass	4 Litre
AR1122-G1L	Amber Glass	1 Litre	AR1122-M25L	Metal	25 Litre
AR1122-G2.5L	Amber Glass	2.5 Litre	AR1122-M200L	Metal	200 Litre



## Methyl ethyl ketone, RCI Premium

Code RP1122

### Specifications

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Appearance	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.001%	max.
Acetone (GC.)	0.05%	max.
2-Butanol (GC.)	0.05%	max.
Methanol (GC.)	0.05%	max.
2-Methylpropan-2-ol (GC.)	0.1%	max.
Substances reducing permanganate (as O)	0.0003%	max.
Aluminium (Al)	0.2	ppm max.

Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1122-G500ML	Amber Glass	500 ML
RP1122-G1L	Amber Glass	1 Litre
RP1122-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1122-G4L	Amber Glass	4 Litre
RP1122-M25L	Metal	25 Litre
RP1122-M200L	Metal	200 Litre

## Methyl ethyl ketone, HPLC

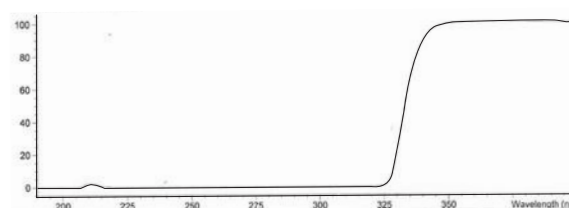
Code LC1122

### Specifications

Assay (by GC.)	99.8%	min.
Appearance	Clear liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
360 nm	99%	min.
350 nm	98%	min.
340 nm	85%	min.
335 nm	50%	min.

Fluorescence (as quinine)		
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1122-G500ML	Amber Glass	500 ML
LC1122-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1122-G2.5L	Amber Glass	2.5 Litre
LC1122-G4L	Amber Glass	4 Litre



Methyl ethyl ketone, Electropure

Code EP1122

Specifications

Assay (by GC.)	99.5%	min.
Water (by Coulometry)	0.05%	max.
Specific resistance (MΩ.cm)	10	min.
Free acid (as CH <sub>3</sub> COOH)	20	ppm max.
Residue on Evaporation	5	ppm max.
Heavy metals (as Pb)	0.2	ppm max.
Aluminium (Al)	0.2	ppm max.
Antimony (Sb)	0.01	ppm max.
Arsenic (As)	0.01	ppm max.
Barium (Ba)	0.1	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.1	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Gallium (Ga)	0.02	ppm max.
Gold (Au)	0.1	ppm max.

Indium (In)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.05	ppm max.
Nickel (Ni)	0.02	ppm max.
Platinum (Pt)	0.2	ppm max.
Potassium (K)	0.1	ppm max.
Silver (Ag)	0.02	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.02	ppm max.
Thallium (Tl)	0.05	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.1	ppm max.
Vanadium (V)	0.05	ppm max.
Zinc (Zn)	0.1	ppm max.
Zirconium (Zr)	0.2	ppm max.

Cat No.	Package	Size
EP1122-G500ML	Amber Glass	500 ML
EP1122-G1L	Amber Glass	1 Litre
EP1122-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
EP1122-G4L	Amber Glass	4 Litre
EP1122-M25L	Metal	25 Litre
EP1122-M200L	Metal	200 Litre



## Methyl ethyl ketone, Extropure

Code XP1122

## Specifications

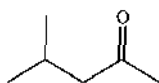
Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Water (by Coulometry)	0.05%	max.
Acidity ( $\mu$ Eq./g.)	0.5	max.
Alkalinity ( $\mu$ Eq./g.)	0.5	max.
Alcohol, ether and benzene miscibility	Complete	
Water Soluble Matter	Passes test	
Residue on Evaporation	5	ppm max.
Aldehyde (Formaldehyde)	20	ppm max.
Substances reducing permanganate (as O)	2	ppm max.
Heavy metals (as Pb)	1	ppm max.
Aluminium (Al)	100	ppb max.
Barium (Ba)	50	ppb max.
Boron (B)	20	ppb max.
Cadmium (Cd)	50	ppb max.

Calcium (Ca)	100	ppb max.
Chromium (Cr)	20	ppb max.
Cobalt (Co)	20	ppb max.
Copper (Cu)	20	ppb max.
Iron (Fe)	100	ppb max.
Lead (Pb)	100	ppb max.
Magnesium (Mg)	100	ppb max.
Manganese (Mn)	20	ppb max.
Nickel (Ni)	20	ppb max.
Tin (Sn)	100	ppb max.
Zinc (Zn)	100	ppb max.
Silicone oil	Free	
DOP	Free	
Amide	Free	

Cat No.	Package	Size
XP1122-G500ML	Amber Glass	500 ML
XP1122-G1L	Amber Glass	1 Litre
XP1122-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
XP1122-G4L	Amber Glass	4 Litre
XP1122-M25L	Metal	25 Litre
XP1122-M200L	Metal	200 Litre

## METHYL ISOBUTYL KETONE



(CH<sub>3</sub>)<sub>2</sub>CHCH<sub>2</sub>COCH<sub>3</sub> FW. 100.16  
 CAS-No. 108-10-1  
 UN No. 1245  
 EC No. 203-550-1  
 Class: 3

Density 1 L = 0.800 Kg.  
 Melting Point -84 °C  
 Boiling Point 116-118 °C  
 EC-Index-No 606-004-00-4  
 Packaging Group: II



GHS: H225, H319, H332, H335, EUH066; P210, P233, P240, P241, P242, P243, P261, P264, P271, P280, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P312, P337 + P313, P370 + P378, P403 + P235, P405

## Methyl isobutyl ketone, AR

Code AR1217

## Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	98.5%	min.
Color (APHA)	15	max.
Water (by Coulometry)	0.1%	max.

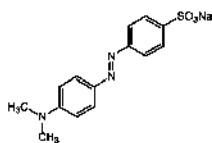
Acidity (mEq./g.)	0.002	max.
Residue on Evaporation	0.005%	max.

Cat No.	Package	Size
AR1217-G500ML	Amber Glass	500 ML
AR1217-G1L	Amber Glass	1 Litre
AR1217-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1217-G4L	Amber Glass	4 Litre
AR1217-M25L	Metal	25 Litre
AR1217-M200L	Metal	200 Litre



## METHYL ORANGE



C <sub>14</sub> H <sub>14</sub> N <sub>2</sub> SO <sub>3</sub> Na	FW. 327.34		
CAS-No. 547-58-0		Melting Point	> 300 °C
UN No. 3143			
EC No. 208-925-3			
Class: 6.1		Packaging Group:	III
GHS:	H301; P264, P270, P301 + P310, P330, P405		



### Methyl Orange Indicator

Code AR1253

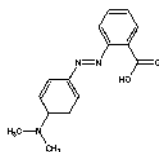
#### Specifications

Appearance	Orange, fine crystalline powder	TLC test	Passes test
Solubility in water	Passes test	Loss on drying	3% max.
Sensitivity for pH change	Passes test		

Cat No.	Package	Size
AR1253-G25G	Amber Glass	25 G
AR1253-G50G	Amber Glass	50 G

Cat No.	Package	Size
AR1253-G100G	Amber Glass	100 G

## METHYL RED



C <sub>15</sub> H <sub>15</sub> N <sub>2</sub> O <sub>2</sub>	FW. 269.31		
CAS-No. 493-52-7		Melting Point	181-182 °C
EC No. 207-776-1			
GHS:	H411; P273, P391		



### Methyl Red Indicator

Code AR1254

#### Specifications

Appearance	Red to brown powder	TLC test	Passes test
Solubility in ethanol	Passes test	Moisture	5% max.

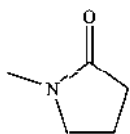
Cat No.	Package	Size
AR1254-G25G	Amber Glass	25 G
AR1254-G50G	Amber Glass	50 G

Cat No.	Package	Size
AR1254-G100G	Amber Glass	100 G





## n-METHYL-2-PYRROLIDONE



C <sub>5</sub> H <sub>9</sub> NO	FW. 99.13	Density 1 L =	1.030 Kg.
CAS-No.	872-50-4	Melting Point	-24 °C
		Boiling Point	202 °C
EC No.	212-828-1	EC-Index-No	606-021-00-7
GHS:	H315, H319, H335, H360D; P201, P202, P261, P264, P271, P280, P302 + P352, P304 + P340, P305 + P351 + P338, P308 + P313, P312, P332 + P313, P337 + P313, P362 + P364, P403 + P233, P405		



### n-Methyl-2-Pyrrolidone, AR

Code AR1123

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Color (APHA)	50	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.005%	max.
Free amine (as CH <sub>3</sub> NH <sub>2</sub> )	0.01%	max.
Chloride (Cl)	1	ppm max.

Cat No.	Package	Size
AR1123-G500ML	Amber Glass	500 ML
AR1123-G1L	Amber Glass	1 Litre
AR1123-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1123-G4L	Amber Glass	4 Litre
AR1123-M25L	Metal	25 Litre
AR1123-M200L	Metal	200 Litre

### n-Methyl-2-Pyrrolidone, RCI Premium

Code RP1123

#### Specifications

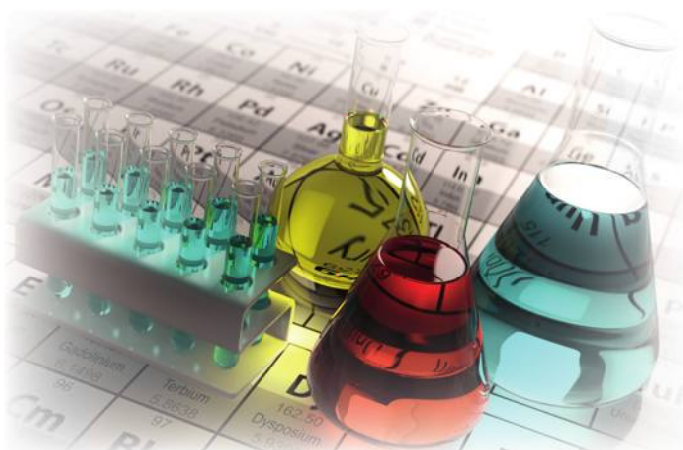
(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Color (APHA)	50	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.005%	max.
Free amine (as CH <sub>3</sub> NH <sub>2</sub> )	0.01%	max.
Chloride (Cl)	1	ppm max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.

Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1123-G500ML	Amber Glass	500 ML
RP1123-G1L	Amber Glass	1 Litre
RP1123-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1123-G4L	Amber Glass	4 Litre
RP1123-M25L	Metal	25 Litre
RP1123-M200L	Metal	200 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**n-Methyl-2-Pyrrolidone, Anhydrous (100 ppm)**

**Code AH1124**

**Specifications**

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.

Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.

Cat No.	Package	Size
AH1124-G100ML	Amber Glass	100 ML
AH1124-G500ML	Amber Glass	500 ML
AH1124-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1124-G2.5L	Amber Glass	2.5 Litre
AH1124-G4L	Amber Glass	4 Litre

**n-Methyl-2-Pyrrolidone, For GC Analysis**

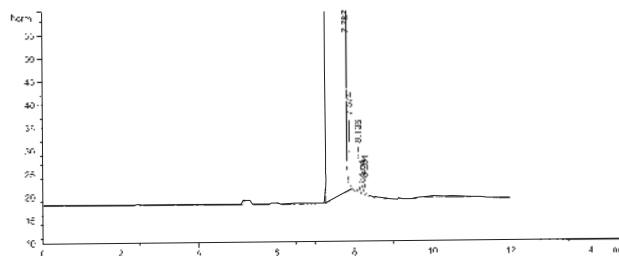
**Code GC1123**

**Specifications**

Description	A clear, colorless liquid	
Assay (by GC.)	99.7%	min.
Weight per ml (at 20 °C)	1.030 - 1.033 g	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
350 nm	99%	min.
330 nm	95%	min.
310 nm	80%	min.

290 nm	70%	min.
280 nm	50%	min.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
GC1123-G500ML	Amber Glass	500 ML
GC1123-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
GC1123-G2.5L	Amber Glass	2.5 Litre



## n-Methyl-2-Pyrrolidone, HPLC

Code LC1123

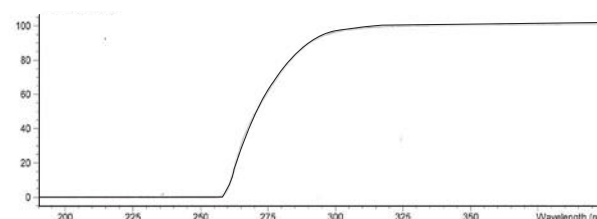
### Specifications

Assay (by GC.)	99.5%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
350 nm	99%	min.
330 nm	95%	min.
310 nm	80%	min.
290 nm	70%	min.
280 nm	50%	min.

Cat No.	Package	Size
LC1123-G500ML	Amber Glass	500 ML
LC1123-G1L	Amber Glass	1 Litre

Fluorescence (as quinine)		
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1123-G2.5L	Amber Glass	2.5 Litre
LC1123-G4L	Amber Glass	4 Litre

## n-Methyl-2-Pyrrolidone, Extropure Plus

Code XP1278

### Specifications

Assay (by GC.)	99.8%	min.
Color (APHA)	50	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Free amine (as CH <sub>3</sub> NH <sub>2</sub> )	0.01%	max.
Bromide (Br)	0.01	ppm max.
Chloride (Cl)	0.05	ppm max.
Fluoride (F)	0.01	ppm max.
Nitrate (NO <sub>3</sub> )	0.03	ppm max.
Nitrite (NO <sub>2</sub> )	0.03	ppm max.
Sulfate (SO <sub>4</sub> )	0.03	ppm max.
Phosphate (PO <sub>4</sub> )	0.01	ppm max.
pH value	8.5 - 10	
Aluminium (Al)	20	ppb max.
Barium (Ba)	10	ppb max.
Boron (B)	10	ppb max.
Cadmium (Cd)	10	ppb max.

Cat No.	Package	Size
XP1278-G500ML	Amber Glass	500 ML
XP1278-G1L	Amber Glass	1 Litre
XP1278-G2.5L	Amber Glass	2.5 Litre

Calcium (Ca)	100	ppb max.
Chromium (Cr)	20	ppb max.
Cobalt (Co)	10	ppb max.
Copper (Cu)	10	ppb max.
Iron (Fe)	50	ppb max.
Lead (Pb)	20	ppb max.
Magnesium (Mg)	50	ppb max.
Manganese (Mn)	10	ppb max.
Nickel (Ni)	10	ppb max.
Tin (Sn)	20	ppb max.
Zinc (Zn)	20	ppb max.

Silicone oil	Free	
DOP	Free	
Amide	Free	
Particle/ml:		
0.5 µm and greater	60	max.
1.0 µm and greater	15	max.

Cat No.	Package	Size
XP1278-G4L	Amber Glass	4 Litre
XP1278-M25L	Metal	25 Litre
XP1278-M200L	Metal	200 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

n-Methyl-2-Pyrrolidone, For Headspace GC Analysis.

Code HS1123

Specifications

Assay (by GC.)	99.8%	min.
Appearance	Clear, colorless liquid	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
UV cutoff wavelength	190-269	nm
UV Transmission Levels (%T)		
> 350 nm	98%	min.
320 nm	90%	min.

300 nm	85%	min.
285 nm	60%	min.
Residual solvent (GC/HS) according to ICH		
Class 1 Solvents	1	ppm max.
Class 2 Solvents	10	ppm max.
Class 3 Solvents	50	ppm max.

Suitable as solvent for the analysis of residual solvent of ICH classes 1,2 and 3 according to Ph Eur and USP. Product passed through 0.2 micron final filter.

Cat No.	Package	Size
HS1123-G1L	Amber Glass	1 Litre

n-Methyl-2-Pyrrolidone, Peptide Synthesis

Code PS1123

Specifications

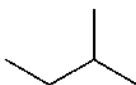
Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
Free Amines	0.001%	max.

Cat No.	Package	Size
PS1123-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PS1123-G2.5L	Amber Glass	2.5 Litre

METHYLBUTANE



CH<sub>3</sub>CH<sub>2</sub>CH(CH<sub>3</sub>)<sub>2</sub> FW. 72.15  
 CAS-No. 78-78-4  
 UN No. 1265  
 EC No. 201-142-8  
 Class: 3

Density 1 L = 0.619 Kg.  
 Melting Point -160 °C  
 Boiling Point 27.9 °C  
 EC-Index-No 601-006-00-1  
 Packaging Group: I



GHS: H224, H304, H336, H411, EUH066; P210, P233, P240, P241, P242, P243, P261, P271, P273, P280, P301 + P310, P303 + P361 + P353, P304 + P340, P312, P331, P391, P370 + P378, P403 + P235, P405

2-Methylbutane 95%, AR

Code AR1119

Specifications

Assay (by GC.)	95.0%	min.
Water (by Coulometry)	0.02%	max.

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.

Cat No.	Package	Size
AR1119-G500ML	Amber Glass	500 ML
AR1119-G1L	Amber Glass	1 Litre
AR1119-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1119-G4L	Amber Glass	4 Litre
AR1119-M25L	Metal	25 Litre
AR1119-M200L	Metal	200 Litre

## 2-Methylbutane 95%, RCI Premium

Code RP1119

### Specifications

Assay (by GC.)	95.0%	min.	Chromium (Cr)	0.01	ppm max.
Color (APHA)	10	max.	Cobalt (Co)	0.01	ppm max.
Water (by Coulometry)	0.02%	max.	Copper (Cu)	0.01	ppm max.
Acidity (mEq./g.)	0.0005	max.	Iron (Fe)	0.05	ppm max.
Residue on Evaporation	0.001%	max.	Lead (Pb)	0.05	ppm max.
Aluminium (Al)	0.2	ppm max.	Magnesium (Mg)	0.05	ppm max.
Barium (Ba)	0.05	ppm max.	Manganese (Mn)	0.01	ppm max.
Boron (B)	0.01	ppm max.	Nickel (Ni)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.	Tin (Sn)	0.05	ppm max.
Calcium (Ca)	0.2	ppm max.	Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1119-G500ML	Amber Glass	500 ML
RP1119-G1L	Amber Glass	1 Litre
RP1119-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1119-G4L	Amber Glass	4 Litre
RP1119-M25L	Metal	25 Litre
RP1119-M200L	Metal	200 Litre

## 2-Methylbutane 99%, AR

Code AR1120

### Specifications

Assay (by GC.)	99.0%	min.	Acidity (mEq./g.)	0.0005	max.
Water (by Coulometry)	0.02%	max.	Residue on Evaporation	0.001%	max.

Cat No.	Package	Size
AR1120-G500ML	Amber Glass	500 ML
AR1120-G1L	Amber Glass	1 Litre
AR1120-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1120-G4L	Amber Glass	4 Litre
AR1120-M25L	Metal	25 Litre
AR1120-M200L	Metal	200 Litre

## 2-Methylbutane 99%, RCI Premium

Code RP1120

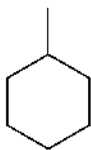
### Specifications

Assay (by GC.)	99.0%	min.	Chromium (Cr)	0.01	ppm max.
Color (APHA)	10	max.	Cobalt (Co)	0.01	ppm max.
Water (by Coulometry)	0.02%	max.	Copper (Cu)	0.01	ppm max.
Acidity (mEq./g.)	0.0005	max.	Iron (Fe)	0.05	ppm max.
Residue on Evaporation	0.001%	max.	Lead (Pb)	0.05	ppm max.
Aluminium (Al)	0.2	ppm max.	Magnesium (Mg)	0.05	ppm max.
Barium (Ba)	0.05	ppm max.	Manganese (Mn)	0.01	ppm max.
Boron (B)	0.01	ppm max.	Nickel (Ni)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.	Tin (Sn)	0.05	ppm max.
Calcium (Ca)	0.2	ppm max.	Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1120-G500ML	Amber Glass	500 ML
RP1120-G1L	Amber Glass	1 Litre
RP1120-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1120-G4L	Amber Glass	4 Litre
RP1120-M25L	Metal	25 Litre
RP1120-M200L	Metal	200 Litre

## METHYLCYCLOHEXANE



$C_7H_{14}$	FW. 98.19	Density 1 L =	0.769 Kg.
CAS-No.	108-87-2	Melting Point	-126 °C
UN No.	2296	Boiling Point	100.9 °C
EC No.	203-624-3	EC-Index-No	601-018-00-7
Class:	3	Packaging Group:	II
GHS:			
H225, H304, H315, H336, H410; P210, P233, P240, P241, P242, P243, P261, P264, P271, P273, P280, P301 + P310, P302 + P352, P303 + P361 + P353, P304 + P340, P312, P331, P332 + P313, P362 + P364, P370 + P378, P391, P403 +			



### Methylcyclohexane, AR

Code AR1121

#### Specifications

Assay (by GC.)	98.0%	min.	Acidity (mEq./g.)	0.0005	max.
Water (by Coulometry)	0.05%	max.	Residue on Evaporation	0.001%	max.

Cat No.	Package	Size
AR1121-G500ML	Amber Glass	500 ML
AR1121-G1L	Amber Glass	1 Litre
AR1121-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1121-G4L	Amber Glass	4 Litre
AR1121-M200L	Metal	200 Litre

### Methylcyclohexane, RCI Premium

Code RP1121

#### Specifications

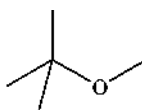
Assay (by GC.)	99.0%	min.	Chromium (Cr)	0.01	ppm max.
Color (APHA)	10	max.	Cobalt (Co)	0.01	ppm max.
Water (by Coulometry)	0.05%	max.	Copper (Cu)	0.01	ppm max.
Acidity (mEq./g.)	0.0005	max.	Iron (Fe)	0.05	ppm max.
Residue on Evaporation	0.001%	max.	Lead (Pb)	0.05	ppm max.
Aluminium (Al)	0.2	ppm max.	Magnesium (Mg)	0.05	ppm max.
Barium (Ba)	0.05	ppm max.	Manganese (Mn)	0.01	ppm max.
Boron (B)	0.01	ppm max.	Nickel (Ni)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.	Tin (Sn)	0.05	ppm max.
Calcium (Ca)	0.2	ppm max.	Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1121-G500ML	Amber Glass	500 ML
RP1121-G1L	Amber Glass	1 Litre
RP1121-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1121-G4L	Amber Glass	4 Litre
RP1121-M200L	Metal	200 Litre



## METHYL-t-BUTYL ETHER



CH <sub>3</sub> OC(CH <sub>3</sub> ) <sub>3</sub>	FW. 88.15	Density 1 L =	0.740 Kg.
CAS-No.	1634-04-4	Melting Point	-108.6 °C
UN No.	2398	Boiling Point	55.3 °C
EC No.	216-653-1	EC-Index-No	603-181-00-X
Class:	3	Packaging Group:	II
GHS:	H225, H315; P210, P233, P240, P241, P242, P243, P264, P280, P302 + P352, P303 + P361 + P353, P332 + P313, P362 + P364, P370 + P378, P403 + P235		



### Methyl-t-butyl ether, AR

Code AR1125

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Peroxides (as H <sub>2</sub> O <sub>2</sub> )	1	ppm max.

Cat No.	Package	Size
AR1125-G500ML	Amber Glass	500 ML
AR1125-G1L	Amber Glass	1 Litre
AR1125-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1125-G4L	Amber Glass	4 Litre
AR1125-M25L	Metal	25 Litre
AR1125-M200L	Metal	200 Litre

### Methyl-t-butyl ether, RCI Premium

Code RP1125

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Peroxides (as H <sub>2</sub> O <sub>2</sub> )	1	ppm max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.

Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1125-G500ML	Amber Glass	500 ML
RP1125-G1L	Amber Glass	1 Litre
RP1125-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1125-G4L	Amber Glass	4 Litre
RP1125-M25L	Metal	25 Litre
RP1125-M200L	Metal	200 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**Methyl-t-butyl ether, HPLC**

**Code LC1125**

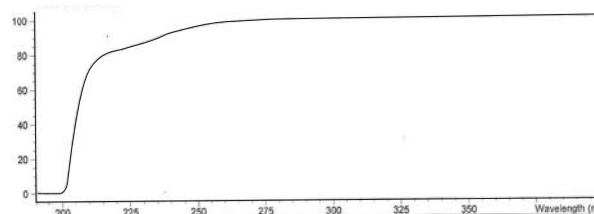
**Specifications**

Assay (by GC.)	99.8%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	1	ppm max.
<b>UV Transmission Levels (%T)</b>		
280 nm	99%	min.
270 nm	98%	min.
260 nm	90%	min.
250 nm	80%	min.
240 nm	60%	min.

**(Meet A.C.S. Specifications)**

<b>Fluorescence (as quinine)</b>		
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1125-G500ML	Amber Glass	500 ML
LC1125-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1125-G2.5L	Amber Glass	2.5 Litre
LC1125-G4L	Amber Glass	4 Litre

**Methyl-t-Butyl Ether, LV-GC**

**Code LV1125**

**Specifications**

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.0003%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	1	ppm max.
ECD (as lindane standard)	10	pg/ml max.
Single impurity peak		
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1125-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1125-G2.5L	Amber Glass	2.5 Litre

**Methyl-t-Butyl Ether, Peptide Synthesis**

**Code PS1125**

**Specifications**

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.

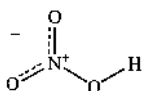
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.0005%	max.
Free Amines	0.001%	max.

Cat No.	Package	Size
PS1125-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PS1125-G2.5L	Amber Glass	2.5 Litre



## NITRIC ACID 5%



HNO <sub>3</sub>	FW. 63.01	Density 1 L =	1.03 Kg.
CAS-No.	7697-37-2	Melting Point	-2.7 °C
UN No.	2031	Boiling Point	101 °C
EC No.	231-714-2	EC-Index-No	007-004-00-1
Class:	8	Packaging Group:	II
GHS:	H290,H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406		



### Nitric Acid 5%, AR

Code AR1129

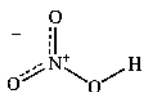
#### Specifications

Assay (by acidimetry)	5.0%	min.	Phosphate (PO <sub>4</sub> )	0.2	ppm max.
Appearance	Passes test		Sulfate (SO <sub>4</sub> )	0.2	ppm max.
Color (APHA)	10	max.	Heavy metals (as Pb)	0.1	ppm max.
Residue after Ignition	3.0	ppm max.	Arsenic (As)	0.004	ppm max.
Chloride (Cl)	0.1	ppm max.	Iron (Fe)	0.1	ppm max.

Cat No.	Package	Size
AR1129-G500ML	Amber Glass	500 ML
AR1129-G1L	Amber Glass	1 Litre
AR1129-G2.5L	Amber Glass	2.5 Litre
AR1129-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1129-G4L	Amber Glass	4 Litre
AR1129-P4L	Plastic	4 Litre
AR1129-P20KG	Plastic	20 KG

## NITRIC ACID 10%



HNO <sub>3</sub>	FW. 63.01	Density 1 L =	1.05 Kg.
CAS-No.	7697-37-2	Melting Point	-6.4 °C
UN No.	2031	Boiling Point	102 °C
EC No.	231-714-2	EC-Index-No	007-004-00-1
Class:	8	Packaging Group:	II
GHS:	H290,H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406		



### Nitric Acid 10%, AR

Code AR1130

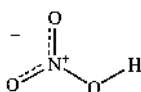
#### Specifications

Assay (by acidimetry)	10%	min.	Phosphate (PO <sub>4</sub> )	0.2	ppm max.
Appearance	Passes test		Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Color (APHA)	10	max.	Heavy metals (as Pb)	0.1	ppm max.
Residue after Ignition	5.0	ppm max.	Arsenic (As)	0.004	ppm max.
Chloride (Cl)	0.1	ppm max.	Iron (Fe)	0.2	ppm max.

Cat No.	Package	Size
AR1130-G500ML	Amber Glass	500 ML
AR1130-G1L	Amber Glass	1 Litre
AR1130-G2.5L	Amber Glass	2.5 Litre
AR1130-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1130-G4L	Amber Glass	4 Litre
AR1130-P4L	Plastic	4 Litre
AR1130-P20KG	Plastic	20 KG

## NITRIC ACID 25%



HNO <sub>3</sub>	FW. 63.01	Density 1 L =	1.15 Kg.
CAS-No.	7697-37-2	Melting Point	- 26.4 °C
UN No.	2031	Boiling Point	105.8 °C
EC No.	231-714-2	EC-Index-No	007-004-00-1
Class:	8	Packaging Group:	II
GHS:	H290, H314, P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363		



### Nitric Acid 25%, AR

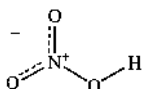
Code AR1406

#### Specifications

Assay (by acidimetry)	25%	min.	Phosphate (PO <sub>4</sub> )	0.2	ppm max.
Appearance	Passes test		Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Color (APHA)	10	max.	Heavy metals (as Pb)	0.1	ppm max.
Residue after Ignition	5.0	ppm max.	Arsenic (As)	0.004	ppm max.
Chloride (Cl)	0.1	ppm max.	Iron (Fe)	0.2	ppm max.

Cat No.	Package	Size
AR1406-P23KG	Plastic	23 KG

## NITRIC ACID 30%



HNO <sub>3</sub>	FW. 63.01	Density 1 L =	1.18 Kg.
CAS-No.	7697-37-2	Melting Point	-36.3 °C
UN No.	2031	Boiling Point	107.2 °C
EC No.	231-714-2	EC-Index-No	007-004-00-1
Class:	8	Packaging Group:	II
GHS:	H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406		



### Nitric Acid 30%, AR

Code AR1131

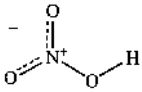
#### Specifications

Assay (by acidimetry)	29.0 - 31.0%	Phosphate (PO <sub>4</sub> )	0.2	ppm max.	
Appearance	Passes test		Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Color (APHA)	10	max.	Heavy metals (as Pb)	0.1	ppm max.
Residue after Ignition	5.0	ppm max.	Arsenic (As)	0.004	ppm max.
Chloride (Cl)	0.1	ppm max.	Iron (Fe)	0.2	ppm max.

Cat No.	Package	Size
AR1131-G500ML	Amber Glass	500 ML
AR1131-G1L	Amber Glass	1 Litre
AR1131-G2.5L	Amber Glass	2.5 Litre
AR1131-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1131-G4L	Amber Glass	4 Litre
AR1131-P4L	Plastic	4 Litre
AR1131-P20KG	Plastic	20 KG
AR1131-P25KG	Plastic	25 KG

## NITRIC ACID 50%



HNO <sub>3</sub>	FW. 63.01	Density 1 L =	1.31 Kg.
CAS-No.	7697-37-2	Melting Point	-19.2 °C
UN No.	2031	Boiling Point	114.7 °C
EC No.	231-714-2	EC-Index-No	007-004-00-1
Class:	8	Packaging Group:	II
GHS:	H290,H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406		



### Nitric Acid 50%, AR

Code AR1132

#### Specifications

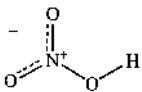
Assay (by acidimetry)	49.5 - 50.5%
Appearance	Passes test
Color (APHA)	10 max.
Residue after Ignition	5.0 ppm max.
Chloride (Cl)	0.1 ppm max.
Phosphate (PO <sub>4</sub> )	0.2 ppm max.
Sulfate (SO <sub>4</sub> )	0.5 ppm max.

Heavy metals (as Pb)	0.1 ppm max.
Arsenic (As)	0.004 ppm max.
Chromium (Cr)	0.1 ppm max.
Copper (Cu)	0.05 ppm max.
Iron (Fe)	0.2 ppm max.
Mercury (Hg)	0.005 ppm max.
Nickel (Ni)	0.05 ppm max.

Cat No.	Package	Size
AR1132-G500ML	Amber Glass	500 ML
AR1132-G1L	Amber Glass	1 Litre
AR1132-G2.5L	Amber Glass	2.5 Litre
AR1132-P2.5L	Plastic	2.5 Litre
AR1132-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
AR1132-P4L	Plastic	4 Litre
AR1132-P20KG	Plastic	20 KG
AR1132-P25KG	Plastic	25 KG
AR1132-P30KG	Plastic	30 KG

## NITRIC ACID 65%



HNO <sub>3</sub>	FW. 63.01	Density 1 L =	1.39 Kg.
CAS-No.	7697-37-2	Melting Point	-29.1 °C
UN No.	2031	Boiling Point	119.6 °C
EC No.	231-714-2	EC-Index-No	007-004-00-1
Class:	8 (5.1)	Packaging Group:	II
GHS:	EUH071, H272, H290, H314; P210, P220, P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363,		



### Nitric Acid 65%, AR

Code AR1133

#### Specifications

(Meet A.C.S. Specifications)

Assay (by acidimetry)	65% min.
Appearance	Passes test
Color (APHA)	10 max.
Residue after Ignition	5.0 ppm max.
Chloride (Cl)	0.1 ppm max.
Phosphate (PO <sub>4</sub> )	0.2 ppm max.
Sulfate (SO <sub>4</sub> )	0.5 ppm max.
Heavy metals (as Pb)	0.1 ppm max.
Arsenic (As)	0.004 ppm max.

Cadmium (Cd)	0.01 ppm max.
Chromium (Cr)	0.1 ppm max.
Copper (Cu)	0.05 ppm max.
Iron (Fe)	0.1 ppm max.
Lead (Pb)	0.01 ppm max.
Mercury (Hg)	0.005 ppm max.
Nickel (Ni)	0.05 ppm max.
Zinc (Zn)	0.02 ppm max.

Cat No.	Package	Size
AR1133-G500ML	Amber Glass	500 ML
AR1133-G1L	Amber Glass	1 Litre
AR1133-G2.5L	Amber Glass	2.5 Litre
AR1133-P2.5L	Plastic	2.5 Litre
AR1133-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
AR1133-P4L	Plastic	4 Litre
AR1133-P20L	Plastic	20 Litre
AR1133-P20KG	Plastic	20 KG
AR1133-P25KG	Plastic	25 KG
AR1133-P30KG	Plastic	30 KG

## Nitric Acid 65%, RCI Premium

Code RP1133

### Specifications

(Meet A.C.S. Specifications)

Assay (by acidimetry)	65.0%	min.
Appearance	Passes test	
Color (APHA)	10	max.
Residue after ignition	4	ppm max.
Chloride (Cl)	0.1	ppm max.
Silicate (SiO <sub>2</sub> )	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Phosphate (PO <sub>4</sub> )	0.2	ppm max.
Heavy metal (as Pb)	0.1	ppm max.
Aluminium (Al)	0.1	ppm max.
Arsenic (As)	0.004	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.05	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.05	ppm max.

Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.02	ppm max.
Gold (Au)	0.1	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.01	ppm max.
Mercury (Hg)	0.005	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.03	ppm max.
Potassium (K)	0.2	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.02	ppm max.
Tin (Sn)	0.2	ppm max.
Titanium (Ti)	0.2	ppm max.
Zinc (Zn)	0.1	ppm max.

Cat No.	Package	Size
RP1133-G500ML	Amber Glass	500 ML
RP1133-G1L	Amber Glass	1 Litre
RP1133-G2.5L	Amber Glass	2.5 Litre
RP1133-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
RP1133-G4L	Amber Glass	4 Litre
RP1133-P4L	Plastic	4 Litre
RP1133-P20L	Plastic	20 Litre
RP1133-P200L	Plastic	200 Litre

## Nitric Acid 65%, Semig

Code SM1133

### Specifications

Assay (by acidimetry)	65.0%	min.
Color (APHA)	10	max.
Chloride (Cl)	0.08	ppm max.
Phosphate (PO <sub>4</sub> )	0.2	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Aluminium (Al)	0.2	ppm max.
Arsenic and Antimony (as As)	0.005	ppm max.
Boron (B)	0.1	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.1	ppm max.
Copper (Cu)	0.05	ppm max.

Gold (Au)	0.3	ppm max.
Iron (Fe)	0.2	ppm max.
Lead (Pb)	0.1	ppm max.
Magnesium (Mg)	0.3	ppm max.
Manganese (Mn)	0.2	ppm max.
Nickel (Ni)	0.05	ppm max.
Potassium (K)	0.3	ppm max.
Sodium (Na)	0.3	ppm max.
Tin (Sn)	0.3	ppm max.
Titanium (Ti)	0.3	ppm max.
Zinc (Zn)	0.3	ppm max.

Cat No.	Package	Size
SM1133-G500ML	Amber Glass	500 ML
SM1133-G1L	Amber Glass	1 Litre
SM1133-G2.5L	Amber Glass	2.5 Litre
SM1133-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1133-G4L	Amber Glass	4 Litre
SM1133-P4L	Plastic	4 Litre
SM1133-P30KG	Plastic	30 KG

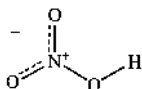
## Specifications

Assay (by acidimetry)	65.0%	min.	Germanium (Ge)	0.005	ppm max.
Mercury (Hg)	0.0000003%	max	Gold (Au)	0.005	ppm max.
Appearance	Passes test		Indium (In)	0.001	ppm max.
Color (APHA)	10	max.	Iron (Fe)	0.08	ppm max.
Residue after Ignition	2	ppm max.	Lead (Pb)	0.005	ppm max.
Chloride (Cl)	0.08	ppm max.	Lithium (Li)	0.001	ppm max.
Phosphate (PO <sub>4</sub> )	0.2	ppm max.	Magnesium (Mg)	0.01	ppm max.
Sulfate (SO <sub>4</sub> )	0.1	ppm max.	Manganese (Mn)	0.001	ppm max.
Heavy metals (as Pb)	0.1	ppm max.	Molybdenum (Mo)	0.001	ppm max.
Aluminium (Al)	0.01	ppm max.	Nickel (Ni)	0.005	ppm max.
Antimony (Sb)	0.005	ppm max.	Platinum (Pt)	0.001	ppm max.
Arsenic (As)	0.005	ppm max.	Potassium (K)	0.005	ppm max.
Barium (Ba)	0.005	ppm max.	Silver (Ag)	0.001	ppm max.
Beryllium (Be)	0.001	ppm max.	Sodium (Na)	0.05	ppm max.
Bismuth (Bi)	0.005	ppm max.	Strontium (Sr)	0.001	ppm max.
Boron (B)	0.005	ppm max.	Tantalum (Ta)	0.002	ppm max.
Cadmium (Cd)	0.001	ppm max.	Thallium (Tl)	0.001	ppm max.
Calcium (Ca)	0.05	ppm max.	Tin (Sn)	0.002	ppm max.
Chromium (Cr)	0.005	ppm max.	Titanium (Ti)	0.001	ppm max.
Cobalt (Co)	0.001	ppm max.	Vanadium (V)	0.001	ppm max.
Copper (Cu)	0.001	ppm max.	Zinc (Zn)	0.01	ppm max.
Gallium (Ga)	0.001	ppm max.	Zirconium (Zr)	0.001	ppm max.

Cat No.	Package	Size
EP1134-G1L	Amber Glass	1 Litre



## NITRIC ACID 70%



HNO <sub>3</sub>	FW. 63.01	Density 1 L =	1.41 Kg.
CAS-No.	7697-37-2	Melting Point	-41 °C
UN No.	2031	Boiling Point	119.9 °C
EC No.	231-714-2	EC-Index-No	007-004-00-1
Class:	8 (5.1)	Packaging Group:	II
GHS: EUH071, H272, H290, H314; P210, P220, P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363,			



### Nitric Acid 70%, AR

Code AR1137

#### Specifications

(Meet A.C.S. Specifications)

Assay (by acidimetry)	69.0 - 70.0 %	
Appearance	Passes test	
Color (APHA)	10	max.
Residue after Ignition	4.0	ppm max.
Chloride (Cl)	0.1	ppm max.
Phosphate (PO <sub>4</sub> )	0.2	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.

Heavy metals (as Pb)	0.1	ppm max.
Arsenic (As)	0.004	ppm max.
Chromium (Cr)	0.1	ppm max.
Copper (Cu)	0.05	ppm max.
Iron (Fe)	0.2	ppm max.
Mercury (Hg)	0.005	ppm max.
Nickel (Ni)	0.05	ppm max.

Cat No.	Package	Size
AR1137-G500ML	Amber Glass	500 ML
AR1137-G1L	Amber Glass	1 Litre
AR1137-G2.5L	Amber Glass	2.5 Litre
AR1137-P2.5L	Plastic	2.5 Litre
AR1137-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
AR1137-P4L	Plastic	4 Litre
AR1137-P20L	Plastic	20 Litre
AR1137-P20KG	Plastic	20 KG
AR1137-P25KG	Plastic	25 KG
AR1137-P30KG	Plastic	30 KG

### Nitric Acid 70%, RCI Premium

Code RP1137

#### Specifications

(Meet A.C.S. Specifications)

Assay (by acidimetry)	69.0 - 70.0 %	
Appearance	Passes test	
Color (APHA)	10	max.
Residue after ignition	0.0004%	max.
Chloride (Cl)	0.00001%	max.
Silicate (as Si)	0.00005%	max.
Sulfate (SO <sub>4</sub> )	0.00005%	max.
Phosphate (PO <sub>4</sub> )	0.00002%	max.
Heavy metal (as Pb)	0.00001%	max.
Aluminium (Al)	0.00001%	max.
Arsenic (As)	0.000004%	max.
Barium (Ba)	0.000005%	max.
Boron (B)	0.000005%	max.
Cadmium (Cd)	0.000002%	max.
Calcium (Ca)	0.00002%	max.
Chromium (Cr)	0.000005%	max.

Cobalt (Co)	0.000001%	max.
Copper (Cu)	0.000002%	max.
Gold (Au)	0.00001%	max.
Iron (Fe)	0.00001%	max.
Lead (Pb)	0.000005%	max.
Magnesium (Mg)	0.00001%	max.
Manganese (Mn)	0.000001%	max.
Mercury (Hg)	0.0000005%	max.
Molybdenum (Mo)	0.000002%	max.
Nickel (Ni)	0.000003%	max.
Potassium (K)	0.00002%	max.
Sodium (Na)	0.00005%	max.
Strontium (Sr)	0.000002%	max.
Tin (Sn)	0.00002%	max.
Titanium (Ti)	0.00002%	max.
Zinc (Zn)	0.00001%	max.

Cat No.	Package	Size
RP1137-G500ML	Amber Glass	500 ML
RP1137-G1L	Amber Glass	1 Litre
RP1137-G2.5L	Amber Glass	2.5 Litre
RP1137-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
RP1137-G4L	Amber Glass	4 Litre
RP1137-P4L	Plastic	4 Litre
RP1137-P20L	Plastic	20 Litre
RP1137-P200L	Plastic	200 Litre

## Nitric Acid 70%, Semig

Code SM1137

### Specifications

Assay (by acidimetry)	69.0 - 70.0%	
Color (APHA)	10	max.
Chloride (Cl)	0.08	ppm max.
Phosphate (PO <sub>4</sub> )	0.2	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Aluminium (Al)	0.2	ppm max.
Arsenic and Antimony (as As)	0.005	ppm max.
Boron (B)	0.1	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.1	ppm max.
Copper (Cu)	0.05	ppm max.

Gold (Au)	0.3	ppm max.
Iron (Fe)	0.2	ppm max.
Lead (Pb)	0.1	ppm max.
Magnesium (Mg)	0.3	ppm max.
Manganese (Mn)	0.2	ppm max.
Nickel (Ni)	0.05	ppm max.
Potassium (K)	0.3	ppm max.
Sodium (Na)	0.3	ppm max.
Tin (Sn)	0.3	ppm max.
Titanium (Ti)	0.3	ppm max.
Zinc (Zn)	0.3	ppm max.

Cat No.	Package	Size
SM1137-G500ML	Amber Glass	500 ML
SM1137-G1L	Amber Glass	1 Litre
SM1137-G2.5L	Amber Glass	2.5 Litre
SM1137-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1137-G4L	Amber Glass	4 Litre
SM1137-P4L	Plastic	4 Litre
SM1137-P30KG	Plastic	30 KG

## Nitric Acid 70%, Semig Plus

Code SM1136

### Specifications

Assay (by acidimetry)	69.0 - 70.0%	
Appearance	Passes test	
Color (APHA)	10	max.
Residue after Ignition	2	ppm max.
Chloride (Cl)	0.08	ppm max.
Phosphate (PO <sub>4</sub> )	0.2	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Heavy metals (as Pb)	0.1	ppm max.
Aluminium (Al)	0.2	ppm max.
Arsenic (As)	0.005	ppm max.
Antimony (Sb)	0.005	ppm max.
Boron (B)	0.01	ppm max.
Calcium (Ca)	0.2	ppm max.

Chromium (Cr)	0.03	ppm max.
Copper (Cu)	0.02	ppm max.
Gold (Au)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.1	ppm max.
Magnesium (Mg)	0.02	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.02	ppm max.
Potassium (K)	0.05	ppm max.
Sodium (Na)	0.2	ppm max.
Tin (Sn)	0.02	ppm max.
Titanium (Ti)	0.01	ppm max.
Zinc (Zn)	0.03	ppm max.

Cat No.	Package	Size
SM1136-G500ML	Amber Glass	500 ML
SM1136-G1L	Amber Glass	1 Litre
SM1136-G2.5L	Amber Glass	2.5 Litre
SM1136-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1136-G4L	Amber Glass	4 Litre
SM1136-P4L	Plastic	4 Litre
SM1136-P20L	Plastic	20 Litre
SM1136-P30KG	Plastic	30 KG





**Nitric Acid 70%, Electropure**

Code EP1137

**Specifications**

Assay (by acidimetry)	69.0 – 70.0%
Appearance	Passes test
Color (APHA)	10 max.
Residue after Ignition	2 ppm max.
Chloride (Cl)	0.1 ppm max.
Phosphate (PO <sub>4</sub> )	0.2 ppm max.
Sulfate (SO <sub>4</sub> )	0.2 ppm max.
Heavy metals (as Pb)	0.1 ppm max.
Aluminium (Al)	0.05 ppm max.
Arsenic and Antimony (as As)	0.005 ppm max.
Barium (Ba)	0.05 ppm max.
Beryllium (Be)	0.02 ppm max.
Bismuth (Bi)	0.05 ppm max.
Boron (B)	0.05 ppm max.
Cadmium (Cd)	0.05 ppm max.
Calcium (Ca)	0.1 ppm max.
Chromium (Cr)	0.02 ppm max.
Cobalt (Co)	0.02 ppm max.
Copper (Cu)	0.01 ppm max.
Gallium (Ga)	0.02 ppm max.
Germanium (Ge)	0.1 ppm max.

Gold (Au)	0.05 ppm max.
Indium (In)	0.02 ppm max.
Iron (Fe)	0.2 ppm max.
Lead (Pb)	0.05 ppm max.
Lithium (Li)	0.02 ppm max.
Magnesium (Mg)	0.05 ppm max.
Manganese (Mn)	0.02 ppm max.
Molybdenum (Mo)	0.05 ppm max.
Nickel (Ni)	0.02 ppm max.
Platinum (Pt)	0.2 ppm max.
Potassium (K)	0.1 ppm max.
Silver (Ag)	0.02 ppm max.
Sodium (Na)	0.2 ppm max.
Strontium (Sr)	0.05 ppm max.
Thallium (Tl)	0.05 ppm max.
Tin (Sn)	0.05 ppm max.
Titanium (Ti)	0.05 ppm max.
Vanadium (V)	0.05 ppm max.
Zinc (Zn)	0.05 ppm max.
Zirconium (Zr)	0.05 ppm max.

Cat No.	Package	Size
EP1137-G500ML	Amber Glass	500 ML
EP1137-G1L	Amber Glass	1 Litre
EP1137-G2.5L	Amber Glass	2.5 Litre
EP1137-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
EP1137-G4L	Amber Glass	4 Litre
EP1137-P4L	Plastic	4 Litre
EP1137-P30KG	Plastic	30 KG





## Nitric Acid 70%, VLSI

Code VL1137

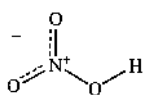
### Specifications

Assay (by acidimetry)	69.0 – 70.0%	Iron (Fe)	50	ppb max.
Appearance	Passes test	Lead (Pb)	5	ppb max.
Color (APHA)	7 max.	Lithium (Li)	1	ppb max.
Residue after Ignition	1 ppm max.	Magnesium (Mg)	10	ppb max.
Chloride (Cl)	0.08 ppm max.	Manganese (Mn)	5	ppb max.
Phosphate (PO <sub>4</sub> )	0.1 ppm max.	Molybdenum (Mo)	1	ppb max.
Sulfate (SO <sub>4</sub> )	0.2 ppm max.	Nickel (Ni)	5	ppb max.
Silicate (as Si)	0.1 ppm max.	Platinum (Pt)	1	ppb max.
Aluminum (Al)	20 ppb max.	Potassium (K)	5	ppb max.
Antimony (Sb)	1 ppb max.	Silver (Ag)	5	ppb max.
Arsenic (As)	1 ppb max.	Sodium (Na)	50	ppb max.
Barium (Ba)	5 ppb max.	Strontium (Sr)	1	ppb max.
Beryllium (Be)	1 ppb max.	Tantalum (Ta)	1	ppb max.
Bismuth (Bi)	5 ppb max.	Thallium (Tl)	1	ppb max.
Boron (B)	5 ppb max.	Tin (Sn)	1	ppb max.
Cadmium (Cd)	1 ppb max.	Titanium (Ti)	5	ppb max.
Calcium (Ca)	50 ppb max.	Vanadium (V)	5	ppb max.
Chromium (Cr)	10 ppb max.	Zinc (Zn)	10	ppb max.
Cobalt (Co)	1 ppb max.	Zirconium (Zr)	1	ppb max.
Copper (Cu)	5 ppb max.	Particle/ml:		
Gallium (Ga)	1 ppb max.	0.5 µm and greater	64	max.
Germanium (Ge)	5 ppb max.			
Gold (Au)	1 ppb max.			
Indium (In)	1 ppb max.			

Cat No.	Package	Size
VL1137-G500ML	Amber Glass	500 ML
VL1137-G1L	Amber Glass	1 Litre
VL1137-G2.5L	Amber Glass	2.5 Litre
VL1137-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
VL1137-G4L	Amber Glass	4 Litre
VL1137-P4L	Plastic	4 Litre
VL1137-P30KG	Plastic	30 KG

## NITRIC ACID 90% Fuming



HNO <sub>3</sub>	FW. 63.01	Density 1 L =	1.48 Kg.
CAS-No.	7697-37-2	Melting Point	-65.2 °C
UN No.	2031	Boiling Point	96.2 °C
EC No.	231-714-2	EC-Index-No	007-004-00-1
Class:	8 (5.1)	Packaging Group:	I
GHS:	EUH071; H272, H290, H314, H331; P210, P220, P234, P260, P264, P280, P271, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P403 + P233, P390, P405, P406		



## Nitric Acid 90% Fuming, AR

Code AR1138

### Specifications

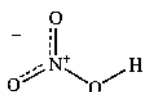
(Meet A.C.S. Specifications)

Assay (by acidimetry)	90% min.	Arsenic (As)	0.01	ppm max.
Dilution test	Passes test	Cadmium (Cd)	0.1	ppm max.
Dissolved Oxides (as N <sub>2</sub> O <sub>5</sub> )	0.1% max.	Copper (Cu)	0.1	ppm max.
Residue after Ignition	0.002% max.	Iron (Fe)	1.0	ppm max.
Chloride (Cl)	0.5 ppm max.	Lead (Pb)	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	2.0 ppm max.	Manganese (Mn)	0.1	ppm max.
Heavy metals (as Pb)	1.0 ppm max.	Nickel (Ni)	0.1	ppm max.

Cat No.	Package	Size
AR1138-G500ML	Amber Glass	500 ML

Cat No.	Package	Size
AR1138-G1L	Amber Glass	1 Litre

## NITRIC ACID 95% Fuming



HNO <sub>3</sub>	FW. 63.01	Density 1 L =	1.49 Kg.
CAS-No.	7697-37-2	Melting Point	-49.5 °C
UN No.	2032	Boiling Point	87.1 °C
EC No.	231-714-2	EC-Index-No	007-004-00-1
Class:	8 (5.1, 6.1)	Packaging Group:	I
GHS:	EUH071; H272, H290, H311 + H331, H314; P210, P220, P234, P260, P264, P271, P280, P301 + P330 + P331, P302 + P352, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P312, P361, P363, P390, P403 + P233, P405, P406		



### Nitric Acid 95% Fuming, AR

Code AR1139

#### Specifications

(Meet A.C.S. Specifications)

Assay (by acidimetry)	95%	min.
Dilution test	Passes test	
Dissolved Oxides (as N <sub>2</sub> O <sub>3</sub> )	0.1%	max.
Residue after Ignition	0.002%	max.
Chloride (Cl)	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	2.0	ppm max.
Heavy metals (as Pb)	1.0	ppm max.

Arsenic (As)	0.01	ppm max.
Cadmium (Cd)	0.1	ppm max.
Copper (Cu)	0.1	ppm max.
Iron (Fe)	1.0	ppm max.
Lead (Pb)	0.5	ppm max.
Manganese (Mn)	0.1	ppm max.
Nickel (Ni)	0.1	ppm max.

Cat No.	Package	Size
AR1139-G500ML	Amber Glass	500 ML

Cat No.	Package	Size
AR1139-G1L	Amber Glass	1 Litre

### Nitric Acid 95% Fuming, Semig

Code SM1139

#### Specifications

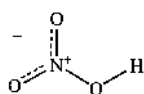
Assay (by acidimetry)	95%	min.
Residue after Ignition	0.002%	max.
Chloride (Cl)	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	2	ppm max.
Aluminium (Al)	0.05	ppm max.
Arsenic (As)	0.02	ppm max.
Barium (Ba)	0.02	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.05	ppm max.
Calcium (Ca)	0.5	ppm max.
Cadmium (Cd)	0.02	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Germanium (Ge)	0.02	ppm max.

Iron (Fe)	1	ppm max.
Lead (Pb)	0.03	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.05	ppm max.
Potassium (K)	0.5	ppm max.
Silver (Ag)	0.05	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.02	ppm max.
Titanium (Ti)	0.05	ppm max.
Thallium (Tl)	0.05	ppm max.
Vanadium (V)	0.02	ppm max.
Zinc (Zn)	0.1	ppm max.
Zirconium (Zr)	0.05	ppm max.

Cat No.	Package	Size
SM1139-G500ML	Amber Glass	500 ML

Cat No.	Package	Size
SM1139-G1L	Amber Glass	1 Litre

## NITRIC ACID 97% Fuming



HNO <sub>3</sub>	FW. 63.01	Density 1 L =	1.49 Kg.
CAS-No.	7697-37-2	Melting Point	-45.3 °C
UN No.	2032	Boiling Point	85.2 °C
EC No.	231-714-2	EC-Index-No	007-004-00-1
Class:	8 (5.1, 6.1)	Packaging Group:	I



GHS: EUH071; H272, H290, H311 + H331, H314; P210, P220, P234, P260, P264, P271, P280, P301 + P330 + P331, P302 + P352, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P312, P361, P363, P390, P403 + P233, P405, P406

### Nitric Acid 97% Fuming, AR

Code AR1135

#### Specifications

(Meet A.C.S. Specifications)

Assay (by acidimetry)	97%	min.
Dilution test	Passes test	
Dissolved Oxides (as N <sub>2</sub> O <sub>3</sub> )	0.1%	max.
Residue after Ignition	0.002%	max.
Chloride (Cl)	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	2.0	ppm max.
Heavy metals (as Pb)	1.0	ppm max.

Arsenic (As)	0.01	ppm max.
Cadmium (Cd)	0.1	ppm max.
Copper (Cu)	0.1	ppm max.
Iron (Fe)	1.0	ppm max.
Lead (Pb)	0.5	ppm max.
Manganese (Mn)	0.1	ppm max.
Nickel (Ni)	0.1	ppm max.

Cat No.	Package	Size
AR1135-G500ML	Amber Glass	500 ML

Cat No.	Package	Size
AR1135-G1L	Amber Glass	1 Litre

## PENTANE , n-PENTANE 95%



CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> CH <sub>3</sub>	FW. 72.15	Density 1 L =	0.630 Kg.
CAS-No.	109-66-0	Melting Point	-129.7 °C
UN No.	1265	Boiling Point	36.1 °C
EC No.	203-692-4	EC-Index-No	601-006-00-1
Class:	3	Packaging Group:	II



GHS: H225, H304, H336, H411, EUH066; P210, P233, P240, P241, P242, P243, P261, P271, P273, P280, P301 + P310, P303 + P361 + P353, P304 + P340, P312, P331, P370 + P378, P391, P403 + P235, P405

### n-Pentane 95%, AR

Code AR1145

#### Specifications

Assay (by GC.)	95.0%	min.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.001%	max.
Sulfur Compounds (S)	0.001%	max.

Cat No.	Package	Size
AR1145-G500ML	Amber Glass	500 ML
AR1145-G1L	Amber Glass	1 Litre
AR1145-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1145-G4L	Amber Glass	4 Litre
AR1145-M20L	Metal	20 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

n-Pentane 95%, RCI Premium

Code RP1145

Specifications

Assay (by GC.)	95.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Sulfur Compounds (S)	0.001%	max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.

Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1145-G500ML	Amber Glass	500 ML
RP1145-G1L	Amber Glass	1 Litre
RP1145-G2.5L	Amber Glass	2.5 Litre
RP1145-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
RP1145-M20L	Metal	20 Litre
RP1145-M25L	Metal	25 Litre
RP1145-M200L	Metal	200 Litre

n-Pentane 95%, HPLC

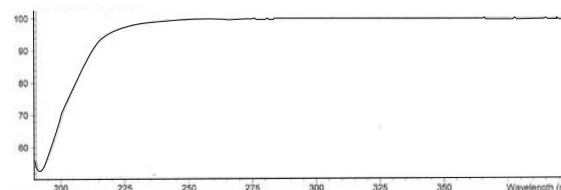
Code LC1145

Specifications

Assay (by GC.)	95.0%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	95%	min.
220 nm	85%	min.
210 nm	60%	min.

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1145-G500ML	Amber Glass	500 ML
LC1145-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1145-G2.5L	Amber Glass	2.5 Litre
LC1145-G4L	Amber Glass	4 Litre



## PENTANE, n-PENTANE 99%



CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> CH <sub>3</sub>	FW. 72.15	Density 1 L =	0.630 Kg.
CAS-No.	109-66-0	Melting Point	-129.7 °C
UN No.	1265	Boiling Point	36.1 °C
EC No.	203-692-4	EC-Index-No	6001-006-00-1
Class:	3	Packaging Group:	II
GHS: H225, H304, H336, H411, EUH066; P210, P233, P240, P241, P242, P243, P261, P271, P273, P280, P301 + P310, P303 + P361 + P353, P304 + P340, P312, P331, P370 + P378, P391, P403 + P235, P405			



### n-Pentane 99%, AR

Code AR1146

#### Specifications

Assay (by GC.)	99.0%	min.	Residue on Evaporation	0.001%	max.
Water (by Coulometry)	0.02%	max.	Sulfur Compounds (S)	0.001%	max.
Acidity (mEq./g.)	0.0005	max.			

Cat No.	Package	Size
AR1146-G500ML	Amber Glass	500 ML
AR1146-G1L	Amber Glass	1 Litre
AR1146-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1146-G4L	Amber Glass	4 Litre
AR1146-M20L	Metal	20 Litre

### n-Pentane 99%, RCI Premium

Code RP1146

#### Specifications

Assay (by GC.)	99.0%	min.	Calcium (Ca)	0.2	ppm max.
Identity (IR)	Passes test		Chromium (Cr)	0.01	ppm max.
Color (APHA)	10	max.	Cobalt (Co)	0.01	ppm max.
Water (by Coulometry)	0.01%	max.	Copper (Cu)	0.01	ppm max.
Acidity (mEq./g.)	0.0002	max.	Iron (Fe)	0.05	ppm max.
Residue on Evaporation	0.001%	max.	Lead (Pb)	0.05	ppm max.
Sulfur Compounds (S)	0.001%	max.	Magnesium (Mg)	0.05	ppm max.
Aluminium (Al)	0.2	ppm max.	Manganese (Mn)	0.01	ppm max.
Barium (Ba)	0.05	ppm max.	Nickel (Ni)	0.01	ppm max.
Boron (B)	0.01	ppm max.	Tin (Sn)	0.05	ppm max.
Cadmium (Cd)	0.02	ppm max.	Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1146-G500ML	Amber Glass	500 ML
RP1146-G1L	Amber Glass	1 Litre
RP1146-G2.5L	Amber Glass	2.5 Litre
RP1146-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
RP1146-M20L	Metal	20 Litre
RP1146-M25L	Metal	25 Litre
RP1146-M200L	Metal	200 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

n-Pentane 99%, UV-IR

Code IR1146

Specifications

Assay (by GC.)	99.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
240 nm	98%	min.

230 nm	95%	min.
220 nm	85%	min.
210 nm	60%	min.
200 nm	20%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1146-G500ML	Amber Glass	500 ML
IR1146-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1146-G2.5L	Amber Glass	2.5 Litre
IR1146-G4L	Amber Glass	4 Litre

n-Pentane 99%, HPLC

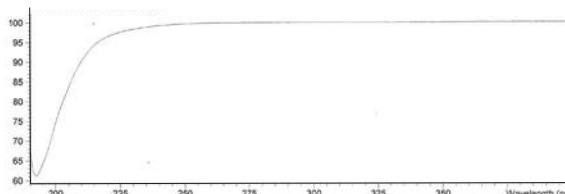
Code LC1146

Specifications

Assay (by GC.)	99.0%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	95%	min.
220 nm	85%	min.
210 nm	60%	min.

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1146-G500ML	Amber Glass	500 ML
LC1146-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1146-G2.5L	Amber Glass	2.5 Litre
LC1146-G4L	Amber Glass	4 Litre

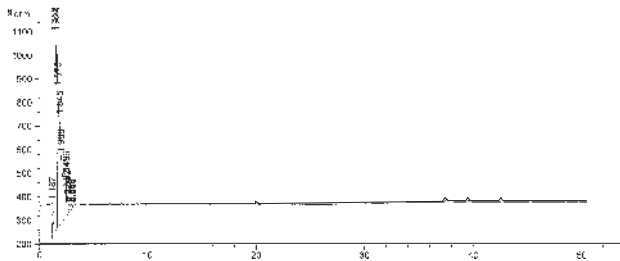


## n-Pentane 99%, Pesticide

Code PC1146

### Specifications

Assay (by GC.)	99.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	ng/L



Cat No.	Package	Size
PC1146-G500ML	Amber Glass	500 ML
PC1146-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1146-G2.5L	Amber Glass	2.5 Litre
PC1146-G4L	Amber Glass	4 Litre

## n-Pentane 99%, LV-GC

Code LV1146

### Specifications

Assay (by GC.)	99.0%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	pg/ml max.
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1146-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1146-G2.5L	Amber Glass	2.5 Litre

## PETROLEUM ETHER 40-60

CAS-No. 64742-49-0  
 UN No. 1268  
 EC No. 265-151-9  
 Class: 3

Density 1 L = 0.645-0.665 Kg.  
 Boiling Point 40-60 °C  
 EC-Index-No 649-328-00-1  
 Packaging Group: II

GHS: H225, H304, H315, H336, H361, H373, H411; P201, P202, P210, P233, P240, P241, P242, P243, P260, P261, P264, P271, P273, P280, P281, P301 + P310, P302 + P352, P303 + P361 + P353, P304 + P340, P308 + P313, P312, P314, P331, P332 + P313, P362, P370 + P378, P391, P403 + P235, P405



## Petroleum Ether 40-60, AR

Code AR1147

### Specifications

Water (by Coulometry)	0.02%	max.
Color (APHA)	10	max.
Acidity (mEq./g.)	0.0005	max.

(Meet A.C.S. Specifications)

Residue on Evaporation	0.001%	max.
Sulfur Compounds (S)	0.002%	max.
Boiling range (°C)	40-60	

Cat No.	Package	Size
AR1147-G500ML	Amber Glass	500 ML
AR1147-G1L	Amber Glass	1 Litre
AR1147-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1147-G4L	Amber Glass	4 Litre
AR1147-M25L	Metal	25 Litre
AR1147-M200L	Metal	200 Litre

Petroleum Ether 40-60, RCI Premium

Code RP1147

Specifications

(Meet A.C.S. Specifications)

Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.001%	max.
Aromatics (as C <sub>6</sub> H <sub>6</sub> )	0.02%	max.
Matter discoloured by H <sub>2</sub> SO <sub>4</sub> (APHA)	10	max.
Peroxide value (by Wheeler)	0.8	max.
Sulfur Compounds (S)	0.002%	max.
Boiling range (°C)	40-60	
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.

Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Molybdenum (Mo)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1147-G500ML	Amber Glass	500 ML
RP1147-G1L	Amber Glass	1 Litre
RP1147-G2.5L	Amber Glass	2.5 Litre

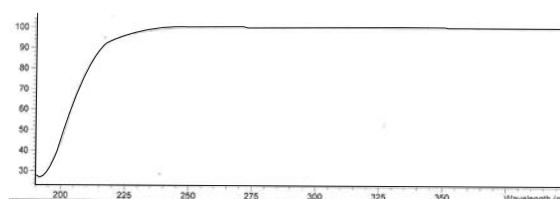
Cat No.	Package	Size
RP1147-G4L	Amber Glass	4 Litre
RP1147-M25L	Metal	25 Litre
RP1147-M200L	Metal	200 Litre

Petroleum Ether 40-60, HPLC

Code LC1147

Specifications

Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
Sulfur Compounds (S)	0.002%	max.
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	90%	min.
220 nm	80%	min.
210 nm	60%	min.



Product passed through 0.2 micron final filter.

Cat No.	Package	Size
LC1147-G500ML	Amber Glass	500 ML
LC1147-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1147-G2.5L	Amber Glass	2.5 Litre
LC1147-G4L	Amber Glass	4 Litre





## Petroleum Ether 40-60, HPLC Plus

Code LC1305

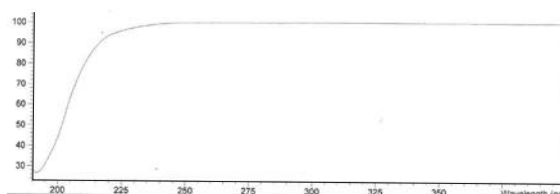
### Specifications

Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
Sulfur Compounds (S)	0.002%	max.
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	90%	min.
220 nm	80%	min.
210 nm	60%	min.
Silicone oil	Free	

Cat No.	Package	Size
LC1305-G500ML	Amber Glass	500 ML
LC1305-G1L	Amber Glass	1 Litre

DOP	Free	
Amide	Free	

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1305-G2.5L	Amber Glass	2.5 Litre
LC1305-G4L	Amber Glass	4 Litre

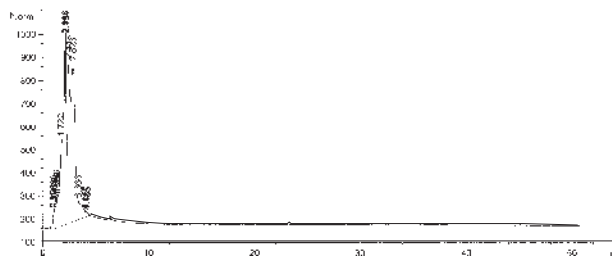
## Petroleum Ether 40-60, Pesticide

Code PC1147

### Specifications

Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
ECD (as lindane standard) Single impurity peak	10	ng/L

Cat No.	Package	Size
PC1147-G500ML	Amber Glass	500 ML
PC1147-G1L	Amber Glass	1 Litre



Cat No.	Package	Size
PC1147-G2.5L	Amber Glass	2.5 Litre
PC1147-G4L	Amber Glass	4 Litre

## Petroleum Ether 40 - 60, LV-GC

Code LV1147

### Specifications

Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.

Cat No.	Package	Size
LV1147-G1L	Amber Glass	1 Litre

Residue on Evaporation	0.0003%	max.
ECD (as lindane standard)	10	pg/ml max.
Single impurity peak		
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1147-G2.5L	Amber Glass	2.5 Litre

## PETROLEUM ETHER 60-80

CAS-No.	64742-49-0	Density 1 L =	0.680 Kg.
UN No.	1268	Boiling Point	60-80 °C
EC No.	265-151-9	EC-Index-No	649-328-00-1
Class:	3	Packaging Group:	II



GHS: H225, H304, H315, H336, H361, H373, H411; P201, P202, P210, P233, P240, P241, P242, P243, P260, P261, P264, P271, P273, P280, P281, P301 + P310, P302 + P352, P303 + P361 + P353, P304 + P340, P308 + P313, P312, P314, P331, P332 + P313, P362, P370 + P378, P391, P403 + P235, P405

### Petroleum Ether 60-80, AR

Code AR1148

#### Specifications

Water (by Coulometry)	0.02%	max.	Residue on Evaporation	0.001%	max.
Acidity (mEq./g.)	0.0005	max.	Sulfur Compounds (S)	0.002%	max.

Cat No.	Package	Size
AR1148-G500ML	Amber Glass	500 ML
AR1148-G1L	Amber Glass	1 Litre
AR1148-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1148-G4L	Amber Glass	4 Litre
AR1148-M25L	Metal	25 Litre
AR1148-M200L	Metal	200 Litre

### Petroleum Ether 60-80, RCI Premium

Code RP1148

#### Specifications

Color (APHA)	10	max.	Calcium (Ca)	0.2	ppm max.
Water (by Coulometry)	0.01%	max.	Chromium (Cr)	0.01	ppm max.
Acidity (mEq./g.)	0.0003	max.	Cobalt (Co)	0.01	ppm max.
Residue on Evaporation	0.001%	max.	Copper (Cu)	0.01	ppm max.
Aromatics (as C <sub>6</sub> H <sub>6</sub> )	0.005%	max.	Iron (Fe)	0.05	ppm max.
Readily carbonizable substances	Passes test		Lead (Pb)	0.05	ppm max.
Sulfur Compounds (S)	0.002%	max.	Magnesium (Mg)	0.05	ppm max.
Boiling range (°C)	60-80		Manganese (Mn)	0.01	ppm max.
Aluminium (Al)	0.2	ppm max.	Molybdenum (Mo)	0.01	ppm max.
Barium (Ba)	0.05	ppm max.	Nickel (Ni)	0.01	ppm max.
Boron (B)	0.01	ppm max.	Tin (Sn)	0.05	ppm max.
Cadmium (Cd)	0.02	ppm max.	Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1148-G500ML	Amber Glass	500 ML
RP1148-G1L	Amber Glass	1 Litre
RP1148-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1148-G4L	Amber Glass	4 Litre
RP1148-M25L	Metal	25 Litre
RP1148-M200L	Metal	200 Litre



## Petroleum Ether 60-80, HPLC

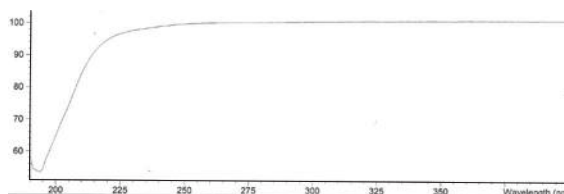
Code LC1148

### Specifications

Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
Sulfur Compounds (S)	0.002%	max.
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	90%	min.
220 nm	80%	min.

210 nm	60%	min.
--------	-----	------

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1148-G500ML	Amber Glass	500 ML
LC1148-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1148-G2.5L	Amber Glass	2.5 Litre
LC1148-G4L	Amber Glass	4 Litre

## Petroleum Ether 60-80, Pesticide

Code PC1148

### Specifications

Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.

Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
ECD (as lindane standard) Single impurity peak	10	ng/L

Cat No.	Package	Size
PC1148-G500ML	Amber Glass	500 ML
PC1148-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1148-G2.5L	Amber Glass	2.5 Litre
PC1148-G4L	Amber Glass	4 Litre

## Petroleum Ether 60 - 80, LV-GC

Code LV1148

### Specifications

Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.0003%	max.
ECD (as lindane standard)	10	pg/ml max.
Single impurity peak		
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1148-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1148-G2.5L	Amber Glass	2.5 Litre



## PETROLEUM ETHER 60 - 90

CAS-No. 64742-49-0 Density 1 L = 0.655-0.730 Kg.  
Boiling Point 60-90 °C

### Petroleum Ether 60 - 90, AR

Code AR1398

#### Specifications

Water (by Coulometry)	0.02%	max.
Color (APHA)	10	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.001%	max.
Boiling range (°C)	60-90	

Cat No.	Package	Size
AR1398-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AR1398-G2.5L	Amber Glass	2.5 Litre

## PETROLEUM ETHER 80 - 100

CAS-No. 64742-49-0 Density 1 L = 0.690 Kg.  
Boiling Point 80-100 °C

### Petroleum Ether 80 - 100, AR

Code AR1149

#### Specifications

Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.005%	max.
Sulfur Compounds (S)	0.002%	max.

Cat No.	Package	Size
AR1149-G500ML	Amber Glass	500 ML
AR1149-G1L	Amber Glass	1 Litre
AR1149-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1149-G4L	Amber Glass	4 Litre
AR1149-M25L	Metal	25 Litre
AR1149-M200L	Metal	200 Litre

### Petroleum Ether 80 - 100, RCI Premium

Code RP1149

#### Specifications

Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.001%	max.
Aromatics (as C6H6)	0.005%	max.
Matter discoloured by H2SO4 (APHA)	10	max.
Sulfur Compounds (S)	0.002%	max.
Boiling range (oC)	80-100	
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.

Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Molybdenum (Mo)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1149-G500ML	Amber Glass	500 ML
RP1149-G1L	Amber Glass	1 Litre
RP1149-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1149-G4L	Amber Glass	4 Litre
RP1149-M25L	Metal	25 Litre
RP1149-M200L	Metal	200 Litre

## PETROLEUM ETHER 90 - 120

CAS-No.	64742-49-0	Density 1 L =	0.685-0.730 Kg.
		Boiling Point	90-120 °C

### Petroleum Ether 90 - 120, AR

Code AR1399

#### Specifications

Water (by Coulometry)	0.02%	max.	Residue on Evaporation	0.005%	max.
Color (APHA)	10	max.	Boiling range (°C)	90-120	
Acidity (mEq./g.)	0.0005	max.			

Cat No.	Package	Size
AR1399-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AR1399-G2.5L	Amber Glass	2.5 Litre

## PETROLEUM ETHER 100 - 120

CAS-No.	64742-49-0	Density 1 L =	0.700 Kg.
		Boiling Point	100-120 °C

### Petroleum Ether 100 - 120, AR

Code AR1150

#### Specifications

Water (by Coulometry)	0.02%	max.	Residue on Evaporation	0.005%	max.
Acidity (mEq./g.)	0.0005	max.	Sulfur Compounds (S)	0.002%	max.

Cat No.	Package	Size
AR1150-G500ML	Amber Glass	500 ML
AR1150-G1L	Amber Glass	1 Litre
AR1150-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1150-G4L	Amber Glass	4 Litre
AR1150-M25L	Metal	25 Litre
AR1150-M200L	Metal	200 Litre

### Petroleum Ether 100 - 120, RCI Premium

Code RP1150

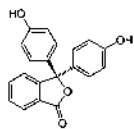
#### Specifications

Color (APHA)	10	max.	Calcium (Ca)	0.2	ppm max.
Water (by Coulometry)	0.01%	max.	Chromium (Cr)	0.01	ppm max.
Acidity (mEq./g.)	0.0003	max.	Cobalt (Co)	0.01	ppm max.
Residue on Evaporation	0.001%	max.	Copper (Cu)	0.01	ppm max.
Aromatics (as C6H6)	0.002%	max.	Iron (Fe)	0.05	ppm max.
Matter discoloured by H2SO4 (APHA)	10	max.	Lead (Pb)	0.05	ppm max.
Sulfur Compounds (S)	0.002%	max.	Magnesium (Mg)	0.05	ppm max.
Boiling range (°C)	100-120		Manganese (Mn)	0.01	ppm max.
Aluminium (Al)	0.2	ppm max.	Molybdenum (Mo)	0.01	ppm max.
Barium (Ba)	0.05	ppm max.	Nickel (Ni)	0.01	ppm max.
Boron (B)	0.01	ppm max.	Tin (Sn)	0.05	ppm max.
Cadmium (Cd)	0.02	ppm max.	Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1150-G500ML	Amber Glass	500 ML
RP1150-G1L	Amber Glass	1 Litre
RP1150-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1150-G4L	Amber Glass	4 Litre
RP1150-M25L	Metal	25 Litre
RP1150-M200L	Metal	200 Litre

## PHENOLPHTHALEIN



$C_{20}H_{14}O_4$	FW. 318.32	Density =	1.30 g/cm <sup>3</sup>
CAS-No.	77-09-8	Melting Point	258 - 261 °C
		Boiling Point	> 450 °C
EC No.	201-004-7	EC-Index-No	604-076-00-1
GHS:	H341, H350, H361; P201, P202, P281, P308 + P313, P405		



### Phenolphthalein Indicator

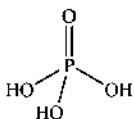
Code AR1256

#### Specifications

Appearance	A white powder	Sensitivity	Passes test
pH range 8.3 - 10.0	Colorless to red-violet	Chloride (Cl)	0.01% max.

Cat No.	Package	Size
AR1256-P100G	Plastic	100 G

## ortho-PHOSPHORIC ACID 85%



$H_3PO_4$	FW. 98.00	Density 1 L =	1.71 Kg.
CAS-No.	7664-38-2	Melting Point	21 °C
UN No.	1805	Boiling Point	158 °C
EC No.	231-633-2	EC-Index-No	015-011-00-6
Class:	8	Packaging Group:	III
GHS:	H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406		



### ortho-Phosphoric acid 85%, Pharma

Code BP1152

#### Specifications

(Meet ACS, Ph.Eur, BP, USP)

Assay (by acidimetry)	85 - 86%	Nitrate (NO <sub>3</sub> )	5	ppm max.
Identification	Passes test	Sulfate (SO <sub>4</sub> )	30	ppm max.
Appearance	Clear and Colorless	Heavy metals (as Pb)	10	ppm max.
Solubility	Passes test	Antimony (Sb)	20	ppm max.
Color (APHA)	10 max.	Arsenic (As)	1	ppm max.
Insoluble matter	10 ppm max.	Calcium (Ca)	20	ppm max.
Substances precipitated with ammonia	Passes test	Iron (Fe)	30	ppm max.
Reducing substances	Passes test	Magnesium (Mg)	20	ppm max.
Alkali Phosphate	Passes test	Manganese (Mn)	0.5	ppm max.
Phosphorous or Hypophosphorous acid	Passes test	Potassium (K)	50	ppm max.
Volatile acids (as CH <sub>3</sub> COOH)	10 ppm max.	Sodium (Na)	250	ppm max.
Chloride (Cl)	3 ppm max.			

Cat No.	Package	Size
BP1152-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
BP1152-G4L	Amber Glass	4 Litre

## ortho-Phosphoric acid 85%, AR

Code AR1152

## Specifications

(Meet A.C.S. Specifications)

Assay (by acidimetry)	85 - 86%
Appearance of solution	Clear
Color (APHA)	10 max.
Identity	Passes Test
Insoluble matter	10 ppm max.
Reducing substances	Passes Test
Volatile acids (as CH <sub>3</sub> COOH)	10 ppm max.
Chloride (Cl)	2 ppm max.
Nitrate (NO <sub>3</sub> )	3 ppm max.
Sulfate (SO <sub>4</sub> )	20 ppm max.
Heavy metals (as Pb)	10 ppm max.
Antimony (Sb)	10 ppm max.
Arsenic (As)	0.5 ppm max.

Cadmium (Cd)	0.5	ppm max.
Calcium (Ca)	20	ppm max.
Cobalt (Co)	0.5	ppm max.
Copper (Cu)	0.5	ppm max.
Iron (Fe)	10	ppm max.
Lead (Pb)	0.5	ppm max.
Magnesium (Mg)	5	ppm max.
Manganese (Mn)	0.5	ppm max.
Nickel (Ni)	1	ppm max.
Potassium (K)	5	ppm max.
Sodium (Na)	50	ppm max.
Zinc (Zn)	2	ppm max.

Cat No.	Package	Size
AR1152-G500ML	Amber Glass	500 ML
AR1152-G1L	Amber Glass	1 Litre
AR1152-G2.5L	Amber Glass	2.5 Litre
AR1152-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
AR1152-G4L	Amber Glass	4 Litre
AR1152-P4L	Plastic	4 Litre
AR1152-P20L	Plastic	20 Litre
AR1152-P200L	Plastic	200 Litre

## ortho-Phosphoric acid 85%, RCI Premium

Code RP1152

## Specifications

(Meet A.C.S. Specifications)

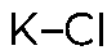
Assay (by acidimetry)	85%	min.
Appearance of solution	Clear	
Color (APHA)	10	max.
Identity	Passes test	
Insoluble matter	0.001%	max.
Reducing substances	Passes test	
Volatile acids (as CH <sub>3</sub> COOH)	0.001%	max.
Chloride (Cl)	0.0002%	max.
Nitrate (NO <sub>3</sub> )	0.0003%	max.
Sulfate (SO <sub>4</sub> )	0.002%	max.
Heavy metals (as Pb)	0.001%	max.
Aluminium (Al)	0.0005%	max.
Arsenic (As)	0.00005%	max.
Antimony (Sb)	0.0005%	max.
Barium (Ba)	0.00005%	max.
Beryllium (Be)	0.00001%	max.
Bismuth (Bi)	0.00001%	max.
Cadmium (Cd)	0.00005%	max.
Calcium (Ca)	0.002%	max.
Chromium (Cr)	0.0005%	max.
Cobalt (Co)	0.00005%	max.
Copper (Cu)	0.00005%	max.

Gallium (Ga)	0.00001%	max.
Germanium (Ge)	0.00001%	max.
Gold (Au)	0.00001%	max.
Iron (Fe)	0.001%	max.
Lead (Pb)	0.00005%	max.
Lithium (Li)	0.00001%	max.
Magnesium (Mg)	0.0005%	max.
Manganese (Mn)	0.00005%	max.
Molybdenum (Mo)	0.0001%	max.
Mercury (Hg)	0.00001%	max.
Nickel (Ni)	0.0001%	max.
Platinum (Pt)	0.00001%	max.
Potassium (K)	0.0005%	max.
Silver (Ag)	0.00001%	max.
Sodium (Na)	0.01%	max.
Strontium (Sr)	0.00001%	max.
Thallium (Tl)	0.00005%	max.
Tin (Sn)	0.00001%	max.
Vanadium (V)	0.00001%	max.
Zinc (Zn)	0.0002%	max.
Zirconium (Zr)	0.0001%	max.

Cat No.	Package	Size
RP1152-G500ML	Amber Glass	500 ML
RP1152-G1L	Amber Glass	1 Litre
RP1152-G2.5L	Amber Glass	2.5 Litre
RP1152-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
RP1152-G4L	Amber Glass	4 Litre
RP1152-P4L	Plastic	4 Litre
RP1152-P20L	Plastic	20 Litre
RP1152-P200L	Plastic	200 Litre

## POTASSIUM CHLORIDE



KCl  
CAS-No. 7447-40-7

Density = 1.98 g/cm<sup>3</sup>  
Melting Point 773 °C

### Potassium Chloride, AR

Code AR1403

#### Specifications

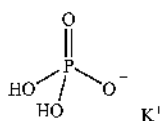
( Meet A.C.S. Specifications )

Assay (by argentometry)	99.0 - 100.5%
pH of a 5% solution (25°C)	5.4 - 8.6
Insoluble matter	0.005% max.
Bromide (Br)	0.01% max.
Chlorate and Nitrate (as NO <sub>3</sub> )	0.003% max.
Iodide (I)	0.002% max.
Sulfate (SO <sub>4</sub> )	0.001% max.

Phosphate (PO <sub>4</sub> )	0.0005%	max.
Heavy metals (as Pb)	0.0005%	max.
Barium (Ba)	Passes test	
Calcium (Ca)	0.002%	max.
Iron (Fe)	0.0003%	max.
Magnesium (Mg)	0.001%	max.
Sodium (Na)	0.005%	max.

Cat No.	Package	Size
AR1403-P500G	Plastic	500 G

## POTASSIUM DIHYDROGEN ORTHOPHOSPHATE ANHYDROUS



KH<sub>2</sub>PO<sub>4</sub>  
CAS-No. 7778-77-0  
EC No. 231-913-4

Density = 2.34 g/cm<sup>3</sup>  
Melting Point 253 °C

### Potassium Dihydrogen Orthophosphate Anhydrous, AR

Code AR1153

#### Specifications

Description	White crystalline powder	
Assay	99.5%	min.
pH (5% Solution)	4.3 - 4.5	
Total Nitrogen (N)	0.001%	max.
Chloride (Cl)	0.0005%	max.

Sulfate (SO <sub>4</sub> )	0.003%	max.
Heavy metals (as Pb)	0.001%	max.
Iron (Fe)	0.001%	max.
Water	0.2%	max.
Sodium (Na)	0.02%	max.

Cat No.	Package	Size
AR1153-P500G	Plastic	500 G
AR1153-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1153-P5KG	Plastic	5 KG
AR1153-P25KG	Plastic	25 KG





## Potassium Dihydrogen Orthophosphate Anhydrous, RCI Premium

Code RP1153

### Specifications

( Meet ACS, Ph Eur, USP, BP )

Description	White crystalline powder or colorless crystals
Assay	99.0 - 100.5 %
Water	0.2% max.
Identification	Passes test
Solubility	Passes test
Appearance of solution	Passes test
Reducing substances	Passes test
pH of 5% Solution (25°C)	4.2 - 4.5
Insoluble matter	0.01% max.

Loss on drying (105°C)	0.2%	max.
Total Nitrogen (N)	0.001%	max.
Chloride (Cl)	0.001%	max.
Fluoride (F)	0.001%	max.
Sulfate (SO <sub>4</sub> )	0.003%	max.
Heavy metals (as Pb)	0.001%	max.
Arsenic (As)	0.0002%	max.
Iron (Fe)	0.001%	max.
Lead (Pb)	0.0005%	max.
Sodium (Na)	0.005%	max.

Cat No.	Package	Size
RP1153-P500G	Plastic	500 G
RP1153-P1KG	Plastic	1 KG

Cat No.	Package	Size
RP1153-P5KG	Plastic	5 KG

## POTASSIUM HYDROXIDE 0.1N

KOH

CAS-No. 1310-58-3  
UN 1814  
EC No. 215-181-3

EC-Index-No 019-002-00-8  
Packaging Group: III



## Potassium hydroxide, 0.1N

Code GN1158

### Specifications

Appearance	Clear, colorless solution
------------	---------------------------

Normality	0.1000N ± 0.0005N
-----------	-------------------

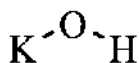
Traceable to NIST

Cat No.	Package	Size
GN1158-G500ML	Amber Glass	500 ML
GN1158-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
GN1158-G2.5L	Amber Glass	2.5 Litre



## POTASSIUM HYDROXIDE 11% SOLUTION



KOH	FW. 56.11	Density 1 L =	1.10 Kg.
CAS-No.	1310-58-3		
UN No.	1814		
EC No.	215-181-3	EC-Index-No	019-002-00-8
Class:	8	Packaging Group:	II
GHS:	H290, H302, H314; P234, P260, P264, P270, P280, P301 + P312, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406		



### Potassium Hydroxide 11% Solution, AR

Code AR1261

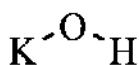
#### Specifications

Assay (by acidimetry)	11.0% ± 1	
pH of solution	13 ± 1	max.
Potassium carbonate (K <sub>2</sub> CO <sub>3</sub> )	1.0%	max.
Nitrogen compounds (as N)	0.0002%	max.
Chloride (Cl)	0.0002%	max.
Phosphate (PO <sub>4</sub> )	0.0002%	max.
Sulfate (SO <sub>4</sub> )	0.0002%	max.

Heavy metal (as Pb)	0.0002%	max.
Aluminium (Al)	0.0005%	max.
Copper (Cu)	0.0001%	max.
Iron (Fe)	0.0002%	max.
Lead (Pb)	0.0002%	max.
Nickel (Ni)	0.0002%	max.
Sodium (Na)	0.2%	max.

Cat No.	Package	Size
AR1261-P20L	Plastic	20 Litre

## POTASSIUM HYDROXIDE 30% SOLUTION



KOH	FW. 56.11	Density 1 L =	1.28 Kg.
CAS-No.	1310-58-3		
UN No.	1814		
EC No.	215-181-3	EC-Index-No	019-002-00-8
Class:	8	Packaging Group:	II
GHS:	H290, H302, H314; P234, P260, P264, P270, P280, P301 + P312, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406		



### Potassium Hydroxide 30% Solution, AR

Code AR1271

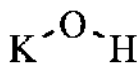
#### Specifications

Assay (by acidimetry)	30.0% ± 1	
pH of solution	13 ± 1	max.
Potassium carbonate (K <sub>2</sub> CO <sub>3</sub> )	1.0%	max.
Nitrogen compounds (as N)	0.0002%	max.
Chloride (Cl)	0.0002%	max.
Phosphate (PO <sub>4</sub> )	0.0002%	max.
Sulfate (SO <sub>4</sub> )	0.0002%	max.

Heavy metal (as Pb)	0.0002%	max.
Aluminium (Al)	0.0005%	max.
Copper (Cu)	0.0001%	max.
Iron (Fe)	0.0002%	max.
Lead (Pb)	0.0002%	max.
Nickel (Ni)	0.0002%	max.
Sodium (Na)	0.2%	max.

Cat No.	Package	Size
AR1271-P20L	Plastic	20 Litre

## POTASSIUM HYDROXIDE 85%



KOH  
CAS-No. 1310-58-3  
EC No. 215-181-3

Density = 2.04 g/cm<sup>3</sup>  
Melting Point 360 °C  
Boiling Point 1320 °C



### Potassium Hydroxide 85%, AR

Code AR1385

#### Specifications

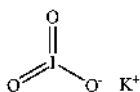
(Meet A.C.S. Specifications)

Assay (by acidimetry)	85.0%	min.
Potassium carbonate (K <sub>2</sub> CO <sub>3</sub> )	2.0%	max.
Nitrogen compounds (as N)	0.001%	max.
Ammonium hydroxide precipitate	0.02%	max.
Chloride (Cl)	0.01%	max.
Phosphate (PO <sub>4</sub> )	0.0005%	max.
Sulfate (SO <sub>4</sub> )	0.003%	max.
Heavy metal (as Ag)	0.001%	max.

Aluminium (Al)	0.001%	max.
Calcium (Ca)	0.005%	max.
Copper (Cu)	0.0005%	max.
Iron (Fe)	0.001%	max.
Lead (Pb)	0.0005%	max.
Magnesium (Mg)	0.002%	max.
Nickel (Ni)	0.001%	max.
Sodium (Na)	0.05%	max.

Cat No.	Package	Size
AR1385-P1KG	Plastic	1 KG

## POTASSIUM IODATE



KIO<sub>3</sub>  
CAS-No. 7758-05-6  
UN No. 1479  
EC No. 231-831-9  
Class: 5.1

Density = 3.98 g/cm<sup>3</sup>  
Melting Point 560 °C



Packaging Group: II

GHS: H272, H315, H319, H335; P210, P220, P221, P261, P264, P271, P280, P302 + P352, P304 + P340, P305 + P351 + P338, P312, P332 + P313, P362, P337 + P313, P403 + P233, P405

### Potassium Iodate, AR

Code AR1159

#### Specifications

Description	White crystalline powder	
Assay	99.5%	min.
pH (5% Water)	5.0 - 8.0	
Loss on drying at 130 °C	0.05%	max.
Total nitrogen (N)	0.002%	max.
Chloride, Chlorate, Bromide (as Cl)	0.02%	max.

Iodide (I)	0.002%	max.
Sulfate (SO <sub>4</sub> )	0.006%	max.
Heavy Metal (as Pb)	0.0006%	max.
Iron (Fe)	0.001%	max.
Sodium (Na)	0.005%	max.

Cat No.	Package	Size
AR1159-P500G	Plastic	500 G
AR1159-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1159-P5KG	Plastic	5 KG
AR1159-P25KG	Plastic	25 KG

## POTASSIUM IODIDE

KI

KI FW. 166.01  
CAS-No. 7681-11-0  
EC No. 231-659-4

Density = 3.13 g/cm<sup>3</sup>  
Melting Point 681 °C  
Boiling Point 1325 °C



### Potassium Iodide, AR

Code AR1245

#### Specifications

(Meet A.C.S. Specifications)

Assay	99.0%	min.
Identification	Passes test	
pH (5% solution at 25 °C)	6.0 - 9.2	
Insoluble matter	0.005%	max.
Loss on drying	0.2%	max.
Chloride and bromide (as Cl)	0.01%	max.
Iodate (IO <sub>3</sub> )	0.0003%	max.
Phosphate (PO <sub>4</sub> )	0.001%	max.

Sulfate (SO <sub>4</sub> )	0.005%	max.
Heavy metals (as Pb)	0.0005%	max.
Barium (Ba)	0.002%	max.
Calcium (Ca)	0.002%	max.
Iron (Fe)	0.0003%	max.
Lead (Pb)	0.0002%	max.
Magnesium (Mg)	0.001%	max.
Sodium (Na)	0.005%	max.

Cat No.	Package	Size
AR1245-P500G	Plastic	500 G
AR1245-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1245-P5KG	Plastic	5 KG
AR1245-P25KG	Plastic	25 KG

## POTASSIUM IODIDE 99.5%

KI

KI FW. 166.01  
CAS-No. 7681-11-0

Density = 3.13 g/cm<sup>3</sup>  
Melting Point 681 °C



### Potassium Iodide 99.5%, AR

Code AR1350

#### Specifications

(Meet A.C.S. Specifications)

Assay	99.5%	min.
Identification	Passes test	
pH (5% solution at 25 °C)	6.0 - 9.2	
Insoluble matter	0.005%	max.
Loss on drying	0.2%	max.
Chloride and bromide (as Cl)	0.01%	max.
Iodate (IO <sub>3</sub> )	0.0003%	max.
Phosphate (PO <sub>4</sub> )	0.001%	max.

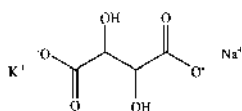
Sulfate (SO <sub>4</sub> )	0.005%	max.
Heavy metals (as Pb)	0.0005%	max.
Barium (Ba)	0.002%	max.
Calcium (Ca)	0.002%	max.
Iron (Fe)	0.0003%	max.
Lead (Pb)	0.0002%	max.
Magnesium (Mg)	0.001%	max.
Sodium (Na)	0.005%	max.

Cat No.	Package	Size
AR1350-P500G	Plastic	500 G

Cat No.	Package	Size
AR1350-P1KG	Plastic	1 KG



## POTASSIUM SODIUM (+) TARTRATE TETRAHYDRATE



$C_4H_4KNaO_6 \cdot 4H_2O$  282.23  
 CAS-No. 6381-59-5  
 EC No. 205-698-2

Melting Range 70-80 °C

### Potassium Sodium (+) Tartrate Tetrahydrate, AR

Code AR1160

#### Specifications

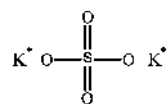
Description	Colorless crystalline powder	
Assay	99.0%	min.
pH (5% solution 20 °C)	7.0 - 8.5	
Reducing substances	Passes test	
Total nitrogen (N)	0.002%	max.
Chloride (Cl)	0.0005%	max.

Phosphate (PO <sub>4</sub> )	0.001%	max.
Sulfate (SO <sub>4</sub> )	0.005%	max.
Heavy metals (as Pb)	0.0005%	max.
Calcium (Ca)	0.004%	max.
Iron (Fe)	0.0005%	max.

Cat No.	Package	Size
AR1160-P500G	Plastic	500 G
AR1160-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1160-P5KG	Plastic	5 KG
AR1160-P25KG	Plastic	25 KG

## POTASSIUM SULFATE



$K_2SO_4$  FW. 174.26  
 CAS-No. 7778-80-5  
 EC No. 231-915-5

Density = 2.66 g/cm<sup>3</sup>  
 Melting Point 1067 °C  
 Boiling Point 1689 °C

### Potassium Sulfate, AR

Code AR1291

#### Specifications

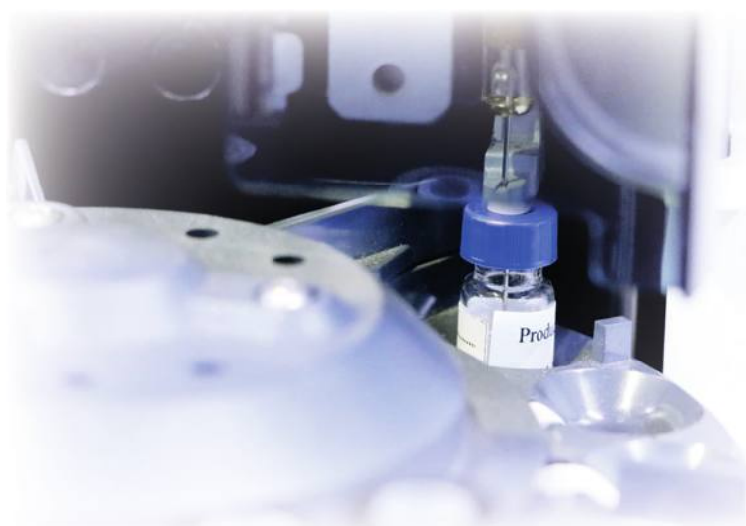
Assay	99.0%	min.
Identification	Passes test	
pH (5% solution at 25 °C)	5.5 - 8.5	
Insoluble matter	0.01%	max.
Chloride (Cl)	0.001%	max.
Nitrogen compounds (as N)	0.0005%	max.

(Meet A.C.S. Specifications)

Heavy metals (as Pb)	0.0005%	max.
Calcium (Ca)	0.01%	max.
Iron (Fe)	0.0005%	max.
Magnesium (Mg)	0.005%	max.
Sodium (Na)	0.02%	max.

Cat No.	Package	Size
AR1291-P500G	Plastic	500 G
AR1291-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1291-P5KG	Plastic	5 KG
AR1291-P25KG	Plastic	25 KG



## PROPAN-1-OL



CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> OH	FW. 60.10	Density 1 L =	0.804 Kg
CAS-No.	71-23-8	Melting Point	-127 °C
UN No.	1274	Boiling Point	97 °C
EC No.	200-746-9	EC-Index-No	603-003-00-0
Class:	3	Packaging Group:	II
GHS:			
H225, H318, H336; P210, P233, P240, P241, P242, P243, P261, P271, P280, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P312, P370 + P378, P403 + P235, P405			



### Propan-1-ol, AR

Code AR1161

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.1%	max.
Acidity (mEq./g.)	0.0004	max.
Residue on Evaporation	0.001%	max.

Ethanol (GC.)	0.01%	max.
Methanol (GC.)	0.01%	max.
2-Propanol (GC.)	0.05%	max.
Carbonyl Compounds (as C <sub>2</sub> H <sub>5</sub> CHO)	0.03%	max.
Solubility in water	Passes test	

Cat No.	Package	Size
AR1161-G500ML	Amber Glass	500 ML
AR1161-G1L	Amber Glass	1 Litre
AR1161-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1161-G4L	Amber Glass	4 Litre
AR1161-M25L	Metal	25 Litre
AR1161-M200L	Metal	200 Litre

### Propan-1-ol, RCI Premium

Code RP1161

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Solubility in water	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0004	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.001%	max.
Acetone (GC.)	0.01%	max.
Ethanol (GC.)	0.01%	max.
Methanol (GC.)	0.01%	max.
Propan-2-ol (GC.)	0.05%	max.
Carbonyl Compounds (as C <sub>2</sub> H <sub>5</sub> CHO)	0.03%	max.
Matter discoloured by H <sub>2</sub> SO <sub>4</sub> (APHA)	10	max.
Chloride (Cl)	300	ppb max.
Nitrate (NO <sub>3</sub> )	300	ppb max.
Phosphate (PO <sub>4</sub> )	500	ppb max.

Sulfate (SO <sub>4</sub> )	1000	ppb max.
Substances reducing permanganate (as O)	2	ppm max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1161-G500ML	Amber Glass	500 ML
RP1161-G1L	Amber Glass	1 Litre
RP1161-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1161-G4L	Amber Glass	4 Litre
RP1161-M25L	Metal	25 Litre
RP1161-M200L	Metal	200 Litre

## Propan-1-ol, HPLC

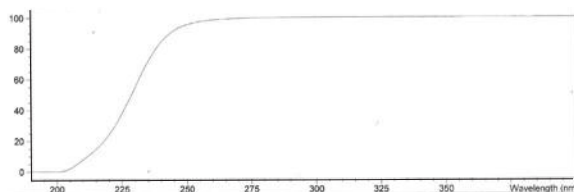
Code LC1161

### Specifications

Assay (by GC.)	99.5%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
300 nm	99%	min.
290 nm	98%	min.
250 nm	90%	min.

Fluorescence (as quinine)		
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1161-G500ML	Amber Glass	500 ML
LC1161-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1161-G2.5L	Amber Glass	2.5 Litre
LC1161-G4L	Amber Glass	4 Litre

## PROPAN-2-OL 80%



(CH <sub>3</sub> ) <sub>2</sub> CHOH	FW. 60.10	Density 1 L =	0.848 Kg
CAS-No.	67-63-0	Melting Point	-89.5 °C
UN No.	1219	Boiling Point	82.4 °C
EC No.	200-661-7	EC-Index-No	603-117-00-0
Class:	3	Packaging Group:	II
GHS:	H225, H319, H336; P210, P233, P240, P241, P242, P243, P261, P264, P271, P280, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P312, P337 + P313, P370 + P378, P403 + P235, P405		



## Propan-2-ol 80%, Pharma

Code BP1157

### Specifications

Assay (by GC.)	80%	min.
Identification	Passes test	
Appearance	Clear	
Water content (by Coulometry)	20%	max.
Acidity or alkalinity	Passes test	
Non-volatile matter	0.002%	max.
Benzene and related substances	Passes test	
Solubility in water	Passes test	
Peroxide	Passes test	

(Conforms to BP/EP/USP/NF)

UV Absorbance		
310 nm	0.01	AU max.
290 nm	0.02	AU max.
270 nm	0.03	AU max.
250 nm	0.10	AU max.
230 nm	0.30	AU max.
Relative density @ 20 °C	0.847 - 0.849	
Refractive Index @ 20 °C	1.376 - 1.378	

Cat No.	Package	Size
BP1157-P20L	Plastic	20 Litre

Cat No.	Package	Size
BP1157-P200L	Plastic	200 Litre



## PROPAN-2-OL



(CH <sub>3</sub> ) <sub>2</sub> CHOH	FW. 60.10	Density 1 L =	0.786 kg
CAS-No.	67-63-0	Melting Point	-89.5 °C
UN No.	1219	Boiling Point	82.4 °C
EC No.	200-661-7	EC-Index-No	603-117-00-0
Class:	3	Packaging Group:	II
GHS: H225, H319, H336; P210, P233, P240, P241, P242, P243, P261, P264, P271, P280, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P312, P337 + P313, P370 + P378, P403 + P235, P405			



### Propan-2-ol, Pharma

Code BP1162

#### Specifications

(Conforms to BP/EP/USP/NF)

Assay (by GC.)	99.8%	min.
Identification	Passes test	
Appearance	Clear	
Water content (by Coulometry)	0.2%	max.
Acidity or alkalinity	Passes test	
Non-volatile matter	0.002%	max.
Benzene and related substances	Passes test	
Solubility in water	Passes test	
Peroxide	Passes test	

UV Absorbance		
310 nm	0.01	AU max.
290 nm	0.02	AU max.
270 nm	0.03	AU max.
250 nm	0.10	AU max.
230 nm	0.30	AU max.
Relative density @ 20 °C	0.785 - 0.789	
Relative density @ 25 °C	0.783 - 0.787	
Refractive Index @ 20 °C	1.376 - 1.378	

Cat No.	Package	Size
BP1162-G500ML	Amber Glass	500 ML
BP1162-G1L	Amber Glass	1 Litre
BP1162-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
BP1162-G4L	Amber Glass	4 Litre
BP1162-M25L	Metal	25 Litre
BP1162-M200L	Metal	200 Litre

### Propan-2-ol, AR

Code AR1162

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.8%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.1%	max.
Acidity (mEq./g.)	0.0001	max.

Residue on Evaporation	0.001%	max.
Carbonyl Compounds (as propionaldehyde or acetone)	0.002%	max.
Solubility in water	Passes test	

Cat No.	Package	Size
AR1162-G500ML	Amber Glass	500 ML
AR1162-G1L	Amber Glass	1 Litre
AR1162-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1162-G4L	Amber Glass	4 Litre
AR1162-M25L	Metal	25 Litre
AR1162-M200L	Metal	200 Litre





## Specifications

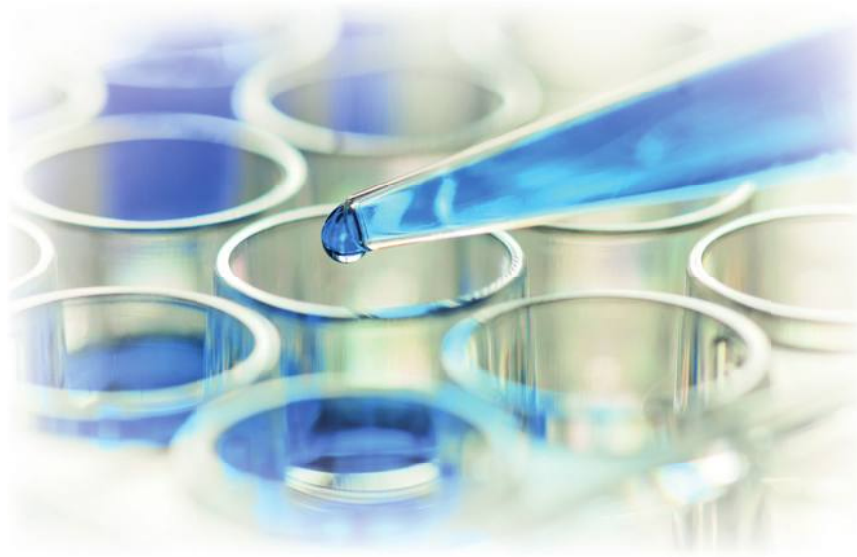
Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Solubility in water	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0001	max.
Alkalinity (mEq./g.)	0.0001	max.
Residue on Evaporation	0.001%	max.
Acetone (GC.)	0.01%	max.
Ethanol (GC.)	0.01%	max.
Isopropylether (GC.)	0.01%	max.
Methanol (GC.)	0.01%	max.
1-Propylalcohol (GC.)	0.1%	max.
Carbonyl Compounds (as propionaldehyde or acetone)	0.002	max.
Chloride (Cl)	0.3	ppm max.
Nitrate (NO <sub>3</sub> )	0.3	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	1	ppm max.
Substances reducing permanganate (as O)	2	ppm max.
UV Absorbance		
310 nm	0.01	max.
290 nm	0.02	max.
270 nm	0.03	max.
250 nm	0.10	max.
230 nm	0.30	max.
Aluminium (Al)	0.5	ppm max.
Antimony (Sb)	0.02	ppm max.
Arsenic (As)	0.02	ppm max.

Cat No.	Package	Size
RP1162-G500ML	Amber Glass	500 ML
RP1162-G1L	Amber Glass	1 Litre
RP1162-G2.5L	Amber Glass	2.5 Litre
RP1162-P2.5L	Plastic	2.5 Litre

## (Meet A.C.S. Specifications and BP/EP/USP/NF)

Barium (Ba)	0.1	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.02	ppm max.
Boron (B)	0.02	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Gallium (Ga)	0.02	ppm max.
Germanium (Ge)	0.02	ppm max.
Gold (Au)	0.02	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.1	ppm max.
Lithium (Li)	0.05	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.02	ppm max.
Nickel (Ni)	0.02	ppm max.
Silver (Ag)	0.02	ppm max.
Thallium (Tl)	0.02	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.02	ppm max.
Vanadium (V)	0.02	ppm max.
Zinc (Zn)	0.1	ppm max.
Zirconium (Zr)	0.02	ppm max.
Relative density @ 20 °C	0.785 - 0.789	
Relative density @ 25 °C	0.783 - 0.787	
Refractive Index @ 20 °C	1.376 - 1.378	

Cat No.	Package	Size
RP1162-G4L	Amber Glass	4 Litre
RP1162-P4L	Plastic	4 Litre
RP1162-P20L	Plastic	20 Litre
RP1162-P200L	Plastic	200 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Propan-2-ol, UV-IR

Code IR1162

### Specifications

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
260 nm	98%	min.

250 nm	95%	min.
230 nm	75%	min.
220 nm	55%	min.
210 nm	25%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1162-G500ML	Amber Glass	500 ML
IR1162-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1162-G2.5L	Amber Glass	2.5 Litre
IR1162-G4L	Amber Glass	4 Litre

## Propan-2-ol, HPLC

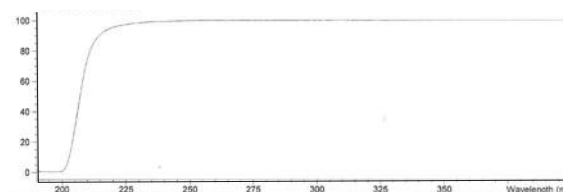
Code LC1162

### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Carbonyl Compounds (as propionaldehyde or acetone)	0.002%	max.
Solubility in water	Passes test	
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	80%	min.
220 nm	60%	min.
210 nm	40%	min.

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1162-G500ML	Amber Glass	500 ML
LC1162-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1162-G2.5L	Amber Glass	2.5 Litre
LC1162-G4L	Amber Glass	4 Litre



## Propan-2-ol, HPLC Plus

Code LC1163

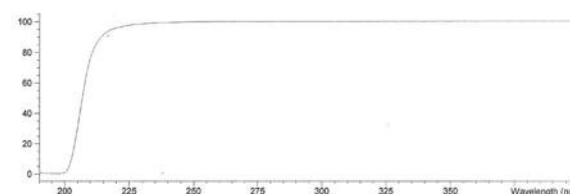
### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Carbonyl Compounds (as propionaldehyde or acetone)	0.002%	max.
Solubility in water	Passes test	
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	80%	min.
220 nm	60%	min.
210 nm	40%	min.

Cat No.	Package	Size
LC1163-G500ML	Amber Glass	500 ML
LC1163-G1L	Amber Glass	1 Litre

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.
Silicone oil	Free	
DOP	Free	
Amide	Free	

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1163-G2.5L	Amber Glass	2.5 Litre
LC1163-G4L	Amber Glass	4 Litre

## Propan-2-ol, LC-MS

Code LM1162

### Specifications

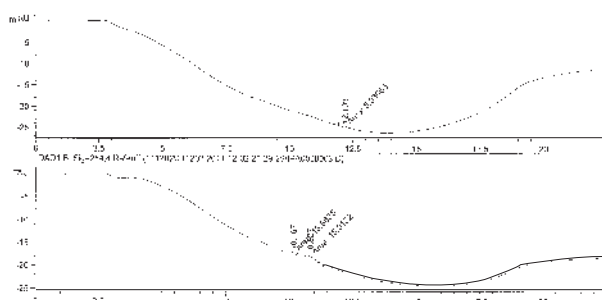
Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	80%	min.
220 nm	60%	min.
210 nm	40%	min.

Gradient Specification		
at 235 nm	1.0	mAU max.
at 254 nm	1.0	mAU max.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.
Aluminium (Al)	5	ppb max.
Barium (Ba)	5	ppb max.
Cadmium (Cd)	5	ppb max.
Calcium (Ca)	20	ppb max.

Cat No.	Package	Size
LM1162-G500ML	Amber Glass	500 ML
LM1162-G1L	Amber Glass	1 Litre

Chromium (Cr)	5	ppb max.
Cobalt (Co)	5	ppb max.
Copper (Cu)	5	ppb max.
Iron (Fe)	10	ppb max.
Lead (Pb)	5	ppb max.
Magnesium (Mg)	5	ppb max.
Manganese (Mn)	5	ppb max.
Nickel (Ni)	5	ppb max.
Potassium (K)	5	ppb max.
Sodium (Na)	20	ppb max.
Tin (Sn)	5	ppb max.
Zinc (Zn)	5	ppb max.

Product passed through 0.1 micron final filter and bottled under inert gas.



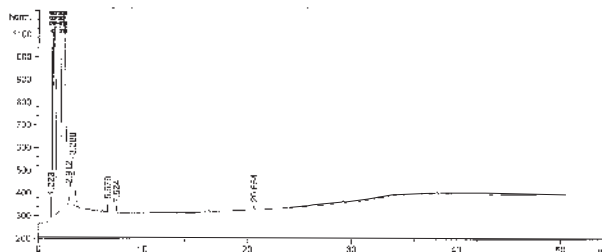
Cat No.	Package	Size
LM1162-G2.5L	Amber Glass	2.5 Litre
LM1162-G4L	Amber Glass	4 Litre

**Propan-2-ol, Pesticide**

Code PC1162

**Specifications**

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	ng/L



Cat No.	Package	Size
PC1162-G500ML	Amber Glass	500 ML
PC1162-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1162-G2.5L	Amber Glass	2.5 Litre
PC1162-G4L	Amber Glass	4 Litre

**Propan-2-ol, Semig**

Code SM1162

**Specifications**

Assay (by GC.)	99.9%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (µEq./g.)	0.2	max.
Alkalinity (µEq./g.)	0.1	max.
Solubility in water	Passes Test	
Residue on Evaporation	5	ppm max.
Chloride (Cl)	0.2	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.
Aluminium (Al)	0.1	ppm max.
Arsenic and Antimony (as As)	0.01	ppm max.
Boron (B)	0.1	ppm max.
Calcium (Ca)	0.1	ppm max.

Chromium (Cr)	0.1	ppm max.
Copper (Cu)	0.01	ppm max.
Gold (Au)	0.1	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.1	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.1	ppm max.
Nickel (Ni)	0.01	ppm max.
Potassium (K)	0.1	ppm max.
Sodium (Na)	0.1	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.1	ppm max.
Zinc (Zn)	0.1	ppm max.

Cat No.	Package	Size
SM1162-G500ML	Amber Glass	500 ML
SM1162-G1L	Amber Glass	1 Litre
SM1162-G2.5L	Amber Glass	2.5 Litre
SM1162-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1162-G4L	Amber Glass	4 Litre
SM1162-P4L	Plastic	4 Litre
SM1162-P20L	Plastic	20 Litre
SM1162-P200L	Plastic	200 Litre



## Propan-2-ol, Semig Plus

Code SM1163

### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Colorless	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (as CH <sub>3</sub> COOH)	0.001%	max.
Specific resistance (MΩ.cm)	10	max.
Residue on Evaporation	5	ppm max.
Chloride (Cl)	0.2	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.
Aluminium (Al)	0.05	ppm max.
Arsenic (As)	0.01	ppm max.
Antimony (Sb)	0.01	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.05	ppm max.

Chromium (Cr)	0.02	ppm max.
Copper (Cu)	0.001	ppm max.
Gold (Au)	0.05	ppm max.
Iron (Fe)	0.03	ppm max.
Lead (Pb)	0.005	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.02	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Potassium (K)	0.05	ppm max.
Silver (Ag)	0.05	ppm max.
Sodium (Na)	0.05	ppm max.
Strontium (Sr)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Titanium (Ti)	0.01	ppm max.
Zinc (Zn)	0.02	ppm max.

Cat No.	Package	Size
SM1163-G500ML	Amber Glass	500 ML
SM1163-G1L	Amber Glass	1 Litre
SM1163-G2.5L	Amber Glass	2.5 Litre
SM1163-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1163-G4L	Amber Glass	4 Litre
SM1163-P4L	Plastic	4 Litre
SM1163-P20L	Plastic	20 Litre
SM1163-P200L	Plastic	200 Litre

## Propan-2-ol, Electropure

Code EP1162

### Specifications

Assay (by GC.)	99.9%	min.
Identity	Corresponds to IR spectrum	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (μEq./g.)	0.2	max.
Alkalinity (μEq./g.)	0.1	max.
Specific resistance (MΩ.cm)	10	min.
Residue on Evaporation	5	ppm max.
Aldehyde and Ketones (as propionic aldehyde)	100	ppm max.
Chloride (Cl)	0.2	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.
Solubility in Water	Passes test	
Heavy metals (as Pb)	0.2	ppm max.
Aluminium (Al)	0.1	ppm max.
Antimony (Sb)	0.01	ppm max.
Arsenic (As)	0.01	ppm max.
Barium (Ba)	0.05	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.1	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.1	ppm max.
Chromium (Cr)	0.02	ppm max.

Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.01	ppm max.
Gallium (Ga)	0.02	ppm max.
Gold (Au)	0.05	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.05	ppm max.
Nickel (Ni)	0.01	ppm max.
Platinum (Pt)	0.2	ppm max.
Potassium (K)	0.1	ppm max.
Silver (Ag)	0.02	ppm max.
Sodium (Na)	0.2	ppm max.
Strontium (Sr)	0.02	ppm max.
Thallium (Tl)	0.05	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.05	ppm max.
Vanadium (V)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.
Zirconium (Zr)	0.2	ppm max.

Cat No.	Package	Size
EP1162-G500ML	Amber Glass	500 ML
EP1162-G1L	Amber Glass	1 Litre
EP1162-G2.5L	Amber Glass	2.5 Litre
EP1162-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
EP1162-G4L	Amber Glass	4 Litre
EP1162-P4L	Plastic	4 Litre
EP1162-P20L	Plastic	20 Litre
EP1162-P200L	Plastic	200 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
**P**  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**Propan-2-ol, Extropure**

Code XP1162

**Specifications**

Assay (by GC.)	99.9%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (µEq./g.)	0.2	max.
Alkalinity (µEq./g.)	0.1	max.
Solubility in water	Passes test	
Residue on Evaporation	3	ppm max.
Chloride (Cl)	0.2	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.
Heavy metals (as Pb)	200	ppb max.
Aluminium (Al)	50	ppb max.
Arsenic and Antimony (as As)	10	ppb max.
Barium (Ba)	20	ppb max.
Boron (B)	10	ppb max.
Cadmium (Cd)	20	ppb max.
Calcium (Ca)	50	ppb max.
Chromium (Cr)	20	ppb max.
Cobalt (Co)	20	ppb max.
Copper (Cu)	10	ppb max.
Gallium (Ga)	30	ppb max.
Germanium (Ge)	30	ppb max.

Gold (Au)	20	ppb max.
Iron (Fe)	50	ppb max.
Lead (Pb)	20	ppb max.
Lithium (Li)	50	ppb max.
Magnesium (Mg)	20	ppb max.
Manganese (Mn)	20	ppb max.
Nickel (Ni)	10	ppb max.
Potassium (K)	100	ppb max.
Silicon (Si)	50	ppb max.
Silver (Ag)	20	ppb max.
Sodium (Na)	100	ppb max.
Strontium (Sr)	20	ppb max.
Tin (Sn)	100	ppb max.
Titanium (Ti)	20	ppb max.
Zinc (Zn)	50	ppb max.
Silicone oil	Free	
DOP	Free	
Amide	Free	
Particle/ml:		
0.5 µm and greater	50	max.
1.0 µm and greater	8	max.

Cat No.	Package	Size
XP1162-G500ML	Amber Glass	500 ML
XP1162-G1L	Amber Glass	1 Litre
XP1162-G2.5L	Amber Glass	2.5 Litre
XP1162-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
XP1162-G4L	Amber Glass	4 Litre
XP1162-P4L	Plastic	4 Litre
XP1162-P20L	Plastic	20 Litre
XP1162-P200L	Plastic	200 Litre





## Specifications

Assay (by GC.)	99.9%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity ( $\mu\text{Eq./g.}$ )	0.2	max.
Alkalinity ( $\mu\text{Eq./g.}$ )	0.1	max.
Solubility in water	Passes test	
Residue on Evaporation	3	ppm max.
Bromide (Br)	0.01	ppm max.
Chloride (Cl)	0.05	ppm max.
Fluoride (F)	0.01	ppm max.
Nitrate ( $\text{NO}_3$ )	0.03	ppm max.
Nitrite ( $\text{NO}_2$ )	0.03	ppm max.
Sulfate ( $\text{SO}_4$ )	0.03	ppm max.
Phosphate ( $\text{PO}_4$ )	0.01	ppm max.
pH Value	6 - 9	
Heavy metals (as Pb)	100	ppb max.
Aluminium (Al)	20	ppb max.
Arsenic and Antimony (as As)	10	ppb max.
Barium (Ba)	10	ppb max.
Beryllium (Be)	10	ppb max.
Bismuth (Bi)	10	ppb max.
Boron (B)	5	ppb max.
Cadmium (Cd)	5	ppb max.
Calcium (Ca)	10	ppb max.
Chromium (Cr)	5	ppb max.
Cobalt (Co)	5	ppb max.
Copper (Cu)	5	ppb max.
Gallium (Ga)	10	ppb max.

Cat No.	Package	Size
XP1277-G500ML	Amber Glass	500 ML
XP1277-G1L	Amber Glass	1 Litre
XP1277-G2.5L	Amber Glass	2.5 Litre
XP1277-P2.5L	Plastic	2.5 Litre

Gold (Au)	10	ppb max.
Indium (In)	10	ppb max.
Iron (Fe)	10	ppb max.
Lead (Pb)	10	ppb max.
Lithium (Li)	5	ppb max.
Magnesium (Mg)	5	ppb max.
Manganese (Mn)	5	ppb max.
Molybdenum (Mo)	10	ppb max.
Nickel (Ni)	5	ppb max.
Platinum (Pt)	20	ppb max.
Potassium (K)	10	ppb max.
Silicon (Si)	50	ppb max.
Silver (Ag)	5	ppb max.
Sodium (Na)	100	ppb max.
Strontium (Sr)	5	ppb max.
Thallium (Tl)	10	ppb max.
Tin (Sn)	10	ppb max.
Titanium (Ti)	10	ppb max.
Vanadium (V)	10	ppb max.
Zinc (Zn)	5	ppb max.
Zirconium (Zr)	10	ppb max.
Silicone oil	Free	
DOP	Free	
Amide	Free	
Particle/ml:		
0.5 $\mu\text{m}$ and greater	50	max.
1.0 $\mu\text{m}$ and greater	8	max.

Cat No.	Package	Size
XP1277-G4L	Amber Glass	4 Litre
XP1277-P4L	Plastic	4 Litre
XP1277-P20L	Plastic	20 Litre
XP1277-P200L	Plastic	200 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
**P**  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Propan-2-ol, VLSI

Code VL1162

### Specifications

Assay (by GC.)	99.9%	min.
Identity	Corresponds to IR spectrum	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (µEq./g.)	0.2	max.
Alkalinity (µEq./g.)	0.1	max.
Specific resistance (MΩ.cm)	10	min.
Residue on Evaporation	3	ppm max.
Aldehyde and Ketones (as propionic aldehyde)	50	ppm max.
Substances reducing permanganate (as O)	2.5	ppm max.
Chloride (Cl)	0.1	ppm max.
Phosphate (PO <sub>4</sub> )	0.1	ppm max.
Sulfate (SO <sub>4</sub> )	1.0	ppm max.
Heavy metals (as Pb)	0.1	ppm max.
Aluminium (Al)	20	ppb max.
Antimony (Sb)	10	ppb max.
Arsenic (As)	10	ppb max.
Barium (Ba)	10	ppb max.
Beryllium (Be)	10	ppb max.
Bismuth (Bi)	10	ppb max.
Boron (B)	5	ppb max.
Cadmium (Cd)	5	ppb max.
Calcium (Ca)	10	ppb max.
Chromium (Cr)	5	ppb max.
Cobalt (Co)	5	ppb max.
Copper (Cu)	5	ppb max.

Gallium (Ga)	10	ppb max.
Gold (Au)	10	ppb max.
Indium (In)	10	ppb max.
Iron (Fe)	10	ppb max.
Lead (Pb)	10	ppb max.
Lithium (Li)	5	ppb max.
Magnesium (Mg)	5	ppb max.
Manganese (Mn)	5	ppb max.
Molybdenum (Mo)	10	ppb max.
Nickel (Ni)	5	ppb max.
Platinum (Pt)	20	ppb max.
Potassium (K)	10	ppb max.
Silver (Ag)	5	ppb max.
Sodium (Na)	100	ppb max.
Strontium (Sr)	5	ppb max.
Thallium (Tl)	10	ppb max.
Tin (Sn)	10	ppb max.
Titanium (Ti)	10	ppb max.
Vanadium (V)	10	ppb max.
Zinc (Zn)	5	ppb max.
Zirconium (Zr)	10	ppb max.
Particle/ml:		
0.5 µm and greater	30	max.
1.0 µm and greater	8	max.

Product passed through 1 micron final filter.

Cat No.	Package	Size
VL1162-G500ML	Amber Glass	500 ML
VL1162-G1L	Amber Glass	1 Litre
VL1162-G2.5L	Amber Glass	2.5 Litre
VL1162-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
VL1162-G4L	Amber Glass	4 Litre
VL1162-P4L	Plastic	4 Litre
VL1162-P20L	Plastic	20 Litre
VL1162-P200L	Plastic	200 Litre

## Propan-2-ol, LV-GC

Code LV1162

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.

Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard)	10	pg/ml max.
Single impurity peak		
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1162-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1162-G2.5L	Amber Glass	2.5 Litre



## Propan-2-ol, Peptide Synthesis

Code PS1162

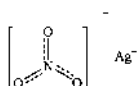
### Specifications

Assay (by GC.)	99.9%	min.	Acidity (mEq./g.)	0.0005	max.
Identity (IR)	Passes test		Residue on Evaporation	0.0005%	max.
Color (APHA)	10	max.	Free Amines	0.001%	max.
Water (by Coulometry)	0.03%	max.			

Cat No.	Package	Size
PS1162-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PS1162-G2.5L	Amber Glass	2.5 Litre

## SILVER NITRATE



AgNO <sub>3</sub>	FW. 169.87	Density =	4.35 g/cm <sup>3</sup>
CAS-No.	7761-88-8	Melting Point	212 °C
UN No.	1493	Boiling Point	444 °C
EC No.	231-853-9	EC-Index-No	047-001-00-2
Class:	5.1	Packaging Group:	II
GHS:	H272, H290, H314, H410; P210, P220, P260, P264, P273, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P391, P405, P406		

## Silver Nitrate, AR

Code AR1246

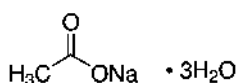
### Specifications

Assay	99.8%	min.	Chloride (Cl)	0.001%	max.
Appearance	Colorless white crystals		Sulfate (SO <sub>4</sub> )	0.01%	max.
	/powder		Copper (Cu)	0.002%	max.
Moisture	0.06%	max.	Iron (Fe)	0.001%	max.
Substances insoluble in water	0.01%	max.	Lead (Pb)	0.002%	max.
Substances not precipitated by HCl	0.06%	max.	Zinc (Zn)	0.002%	max.

Cat No.	Package	Size
AR1246-P25G	Plastic	25 G
AR1246-100G	Plastic	100 G

Cat No.	Package	Size
AR1246-500G	Plastic	500 G

## SODIUM ACETATE TRIHYDRATE



CH <sub>3</sub> COONa.3H <sub>2</sub> O	FW. 136.08	Density =	1.42 g/cm <sup>3</sup>
CAS-No.	6131-90-4	Melting Point	58 °C
		Boiling Point	> 400 °C
EC No.	204-823-8		

## Sodium Acetate Trihydrate, AR

Code AR1165

### Specifications

Description	White crystalline powder		Sulfate (SO <sub>4</sub> )	0.002%	max.
Assay	99.5%	min.	Aluminium (Al)	0.0005%	max.
pH (5% Water)	7.5 - 9.0		Calcium (Ca)	0.001%	max.
Insoluble matter	0.001%	max.	Copper (Cu)	0.0005%	max.
Substances reducing permanganate (as O)	0.004%	max.	Iron (Fe)	0.0005%	max.
Nitrogen Compound (N)	0.001%	max.	Lead (Pb)	0.0005%	max.
Chloride (Cl)	0.0005%	max.	Magnesium (Mg)	0.0005%	max.
Phosphate (PO <sub>4</sub> )	0.0002%	max.	Potassium (K)	0.0005%	max.

Cat No.	Package	Size
AR1165-P500G	Plastic	500 G
AR1165-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1165-P5KG	Plastic	5 KG
AR1165-P25KG	Plastic	25 KG

## SODIUM CHLORIDE

### NaCl

NaCl	FW. 58.44
CAS-No.	7647-14-5
EC No.	231-598-3

Density =	2.17 g/cm <sup>3</sup>
Melting Point	801 °C
Boiling Point	1461 °C

### Sodium Chloride 99%, AR

Code AR1166

#### Specifications

( Meet A.C.S. Specifications )

Assay (by argentometry)	99.0%	min.
Chlorate and nitrate (as NO <sub>3</sub> )	0.003%	max.
pH of a 5% solution at 25 °C	5.0 - 8.0	
Insoluble matter	0.005%	max.
Nitrogen Compounds (as N)	0.001%	max.
Bromide (Br)	0.005%	max.
Iodide (I)	0.001%	max.
Phosphate (PO <sub>4</sub> )	0.0005%	max.

Sulfate (SO <sub>4</sub> )	0.001%	max.
Heavy metals (as Pb)	0.0005%	max.
Barium (Ba)	0.001%	max.
Calcium (Ca)	0.002%	max.
Magnesium (Mg)	0.001%	max.
Iron (Fe)	0.0002%	max.
Potassium (K)	0.005%	max.

Cat No.	Package	Size
AR1166-P500G	Plastic	500 G
AR1166-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1166-P5KG	Plastic	5 KG
AR1166-P25KG	Plastic	25 KG

### Sodium Chloride 99.5%, AR

Code AR1167

#### Specifications

( Meet A.C.S. Specifications )

Assay (by argentometry)	99.5%	min.
Chlorate and nitrate (as NO <sub>3</sub> )	0.003%	max.
pH of a 5% solution at 25 °C	5.0 - 8.0	
Insoluble matter	0.005%	max.
Nitrogen compounds (as N)	0.001%	max.
Bromide (Br)	0.005%	max.
Iodide (I)	0.001%	max.
Phosphate (PO <sub>4</sub> )	0.0005%	max.

Sulfate (SO <sub>4</sub> )	0.001%	max.
Heavy metals (as Pb)	0.0005%	max.
Barium (Ba)	0.001%	max.
Calcium (Ca)	0.002%	max.
Magnesium (Mg)	0.001%	max.
Iron (Fe)	0.0002%	max.
Potassium (K)	0.005%	max.

Cat No.	Package	Size
AR1167-P500G	Plastic	500 G
AR1167-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1167-P5KG	Plastic	5 KG
AR1167-P25KG	Plastic	25 KG

### Sodium Chloride 99.9%, AR

Code AR1227

#### Specifications

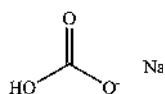
Description	White crystalline powder
Assay (by argentometry)	99.9% min.
Acidity (HCl)	0.0018% max.
Insoluble matter	0.003% max.
Ferrocyanide (Fe(CN) <sub>6</sub> )	0.0001% max.
Bromide & Iodide	0.005% max.
Nitrate (NO <sub>3</sub> )	0.0005% max.
Phosphate (PO <sub>4</sub> )	0.0005% max.
Sulfate (SO <sub>4</sub> )	0.002% max.

Ammonium (NH <sub>4</sub> )	0.0005%	max.
Arsenic (As)	0.00004%	max.
Barium (Ba)	0.001%	max.
Calcium (Ca)	0.002%	max.
Copper (Cu)	0.0002%	max.
Iron (Fe)	0.0003%	max.
Lead (Pb)	0.0002%	max.
Magnesium (Mg)	0.002%	max.
Potassium (K)	0.01%	max.

Cat No.	Package	Size
AR1227-P500G	Plastic	500 G
AR1227-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1227-P5KG	Plastic	5 KG
AR1227-P25KG	Plastic	25 KG

## SODIUM HYDROGEN CARBONATE



NaHCO<sub>3</sub> FW. 84.01  
CAS-No. 144-55-8  
EC No. 205-633-8

Density = 2.22 g/cm<sup>3</sup>  
Melting Point 270 °C

### Sodium Hydrogen Carbonate, AR

Code AR1168

#### Specifications

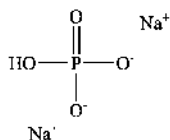
Description	A soft white crystalline powder	
Assay	99.5%	min.
pH of solution	8.4	max.
Insoluble matter	0.02%	max.
Substances reducing iodine (I)	0.0065%	max.
Nitrogen Compound (N)	0.001%	max.
Ammonium (NH <sub>4</sub> )	0.005%	max.
Chloride (Cl)	0.003%	max.
Phosphate (PO <sub>4</sub> )	0.005%	max.

Silicate (SiO <sub>2</sub> )	0.005%	max.
Sulfate (SO <sub>4</sub> )	0.003%	max.
Arsenic (As)	0.00004%	max.
Calcium (Ca)	0.005%	max.
Copper (Cu)	0.0005%	max.
Iron (Fe)	0.001%	max.
Lead (Pb)	0.0005%	max.
Magnesium (Mg)	0.005%	max.
Potassium (K)	0.005%	max.

Cat No.	Package	Size
AR1168-P500G	Plastic	500 G
AR1168-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1168-P5KG	Plastic	5 KG
AR1168-P25KG	Plastic	25 KG

## di-SODIUM HYDROGEN PHOSPHATE ANHYDROUS



Na<sub>2</sub>HPO<sub>4</sub> FW. 141.96  
CAS-No. 7558-79-4  
EC No. 231-448-7

Melting Point ~250 °C

### di-Sodium Hydrogen Phosphate Anhydrous, AR

Code AR1237

#### Specifications

Assay	99.0%	min.
pH of a 5% solution (25 °C)	8.7 - 9.3	
Insoluble matter	0.01%	max.
Loss on drying	0.2%	max.

Heavy metals (as Pb)	0.001%	max.
Chloride (Cl)	0.002%	max.
Sulfate (SO <sub>4</sub> )	0.005%	max.
Iron (Fe)	0.002%	max.

Cat No.	Package	Size
AR1237-P500G	Plastic	500 G
AR1237-P5KG	Plastic	5 KG

Cat No.	Package	Size
AR1237-P25KG	Plastic	25 KG



## di-Sodium Hydrogen Phosphate Anhydrous, RCI Premium

Code RP1237

### Specifications

( Meet Ph Eur, BP, USP )

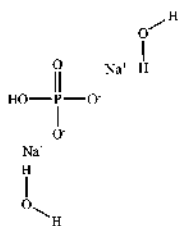
Assay	99.0%	min.
Identification	Passes test	
Appearance of solution	Passes test	
Residual solvent	Passes test	
Reducing substances	Passes test	
pH of 5% water (25 °C)	8.7 - 9.3	
Insoluble in water	0.4%	max.
Loss on drying (130 °C)	1.0%	max.
Sodium dihydrogen phosphate (NaH <sub>2</sub> PO <sub>4</sub> )	0.01%	max.

Chloride (Cl)	0.002%	max.
Sulfate (SO <sub>4</sub> )	0.005%	max.
Heavy metals (as Pb)	0.001%	max.
Arsenic (As)	0.0002%	max.
Copper (Cu)	0.001%	max.
Iron (Fe)	0.002%	max.
Lead (Pb)	0.001%	max.
Mercury (Hg)	0.0001%	max.
Zinc (Zn)	0.002%	max.

Cat No.	Package	Size
RP1237-P500G	Plastic	500 G
RP1237-P1KG	Plastic	1 KG

Cat No.	Package	Size
RP1237-P5KG	Plastic	5 KG

## di-SODIUM HYDROGEN PHOSPHATE DIHYDRATE



Na<sub>2</sub>HPO<sub>4</sub>·2H<sub>2</sub>O  
 FW. 177.99  
 CAS-No. 10028-24-7  
 EC No. 231-448-7

Density = 2.1 g/cm<sup>3</sup>  
 Melting Point 92.5 °C

## di-Sodium Hydrogen Phosphate Dihydrate, AR

Code AR1238

### Specifications

Assay	99.5%	min.
pH of 5% water (20 °C)	9.0 - 9.2	
Total Nitrogen (N)	0.001%	max.
Chloride (Cl)	0.001%	max.

Sulfate (SO <sub>4</sub> )	0.005%	max.
Heavy metals (as Pb)	0.001%	max.
Iron (Fe)	0.001%	max.
Potassium (K)	0.005%	max.

Cat No.	Package	Size
AR1238-P500G	Plastic	500 G
AR1238-P5KG	Plastic	5 KG

Cat No.	Package	Size
RP1237-P5KG	Plastic	5 KG



## SODIUM HYDROXIDE (MICROPEARLS)

**NaOH**

NaOH	FW. 40.00	Density =	2.13 g/cm <sup>3</sup>
CAS-No.	1310-73-2	Melting Point	323 °C
UN No.	1823	Boiling Point	1390 °C
EC No.	215-185-5	EC-Index-No	011-002-00-6
Class	8	Packaging Group	II

GHS: H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406

### Sodium Hydroxide (Micropearls), AR

Code AR1325

#### Specifications

Assay (by acidimetry)	99.0%	min.	Heavy metals (as Ag)	0.002%	max.
Sodium carbonate (Na <sub>2</sub> CO <sub>3</sub> )	1.0%	max.	Calcium (Ca)	0.005%	max.
Nitrogen Compounds (as N)	0.001%	max.	Iron (Fe)	0.001%	max.
Chloride (Cl)	0.03%	max.	Magnesium (Mg)	0.002%	max.
Phosphate (PO <sub>4</sub> )	0.001%	max.	Mercury (Hg)	0.00001%	max.
Sulfate (SO <sub>4</sub> )	0.03%	max.	Nickel (Ni)	0.001%	max.
Iron oxide (Fe <sub>2</sub> O <sub>3</sub> )	0.001%	max.	Potassium (K)	0.02%	max.

Cat No.	Package	Size
AR1325 P500G	Plastic	500 G
AR1325-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1325-P5KG	Plastic	5 KG
AR1325-P25KG	Plastic	25 KG

## SODIUM HYDROXIDE 0.1N

**NaOH**

CAS-No.	1310-73-2	EC-Index-No	011-002-00-6
UN No.	1824	Packaging Group	III
EC No.	215-185-5		
Class	8		

### Sodium hydroxide, 0.1N

Code GN1173

#### Specifications

Appearance	Clear, colorless solution	Normality	0.1000N ± 0.0005N
------------	---------------------------	-----------	-------------------

Traceable to NIST

Cat No.	Package	Size
GN1173-P1L	Plastic	1 Litre
GN1173-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
GN1173-P4L	Plastic	4 Litre
GN1173-P20L	Plastic	20 Litre



## SODIUM HYDROXIDE 0.5N

**NaOH**

CAS-No.	1310-73-2		
UN No.	1824		
EC No.	215-185-5	EC-Index-No	011-002-00-6
Class	8	Packaging Group	III
GHS:	H290, H315, H319; P234, P264, P280, P302+P352, P305 + P351 + P338, P332 + P313, P337 + P313, P362, P390, P406		



### Sodium hydroxide, 0.5N

Code GN1321

#### Specifications

Appearance	Clear, colorless solution	Normality	0.500N ± 0.001N
------------	---------------------------	-----------	-----------------

Traceable to NIST

Cat No.	Package	Size
GN1321-P1L	Plastic	1 Litre
GN1321-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
GN1321-P4L	Plastic	4 Litre
GN1321-P20L	Plastic	20 Litre

## SODIUM HYDROXIDE 1.0 N

**NaOH**

CAS-No.	1310-73-2		
UN No.	1824		
EC No.	215-185-5	EC-Index-No	011-002-00-6
Class	8	Packaging Group	III
GHS:	H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406		



### Sodium hydroxide, 1.0N

Code GN1174

#### Specifications

Appearance	Clear, colorless solution	Normality	1.000N ± 0.005N
------------	---------------------------	-----------	-----------------

Traceable to NIST

Cat No.	Package	Size
GN1174-P1L	Plastic	1 Litre
GN1174-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
GN1174-P4L	Plastic	4 Litre



## SODIUM HYDROXIDE 25% SOLUTION

NaOH

NaOH	FW. 40.00	Density 1 L =	1.28 Kg.
CAS-No.	1310-73-2		
UN No.	1824		
EC No.	215-185-5	EC-Index-No	011-002-00-6
Class	8	Packaging Group	II
GHS:	H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406		

### Sodium Hydroxide 25% Solution, AR

Code AR1265

#### Specifications

Assay (by acidimetry)	25.0 - 26.0%	Cobalt (Co)	0.5	ppm max.
Sodium carbonate (Na <sub>2</sub> CO <sub>3</sub> )	0.5% max.	Copper (Cu)	5	ppm max.
Ammonium (NH <sub>4</sub> )	20 ppm max.	Iron (Fe)	1	ppm max.
Chloride (Cl)	20 ppm max.	Lead (Pb)	0.5	ppm max.
Nitrate (NO <sub>3</sub> )	20 ppm max.	Magnesium (Mg)	0.5	ppm max.
Phosphate (PO <sub>4</sub> )	5 ppm max.	Nickel (Ni)	1	ppm max.
Sulfate (SO <sub>4</sub> )	10 ppm max.	Potassium (K)	500	ppm max.
Aluminium (Al)	0.5 ppm max.	Silicon (Si)	10	ppm max.
Calcium (Ca)	0.5 ppm max.	Zinc (Zn)	0.5	ppm max.
Chromium (Cr)	1 ppm max.			

Cat No.	Package	Size
AR1265-P4L	Plastic	4 Litre

Cat No.	Package	Size
AR1265-P20L	Plastic	20 Litre

## SODIUM HYDROXIDE 30% SOLUTION

NaOH

NaOH	FW. 40.00	Density 1 L =	1.33 Kg.
CAS-No.	1310-73-2		
UN No.	1824		
EC No.	215-185-5	EC-Index-No	011-002-00-6
Class	8	Packaging Group	II
GHS:	H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406		



### Sodium Hydroxide 30% Solution, AR

Code AR1332

#### Specifications

Assay (by acidimetry)	30.0 - 31.0%	Heavy metals (as Ag)	0.002%	max.
Sodium carbonate (Na <sub>2</sub> CO <sub>3</sub> )	1.0% max.	Calcium (Ca)	0.005%	max.
Nitrogen Compounds (as N)	0.001% max.	Iron (Fe)	0.001%	max.
Chloride (Cl)	0.03% max.	Magnesium (Mg)	0.002%	max.
Phosphate (PO <sub>4</sub> )	0.001% max.	Mercury (Hg)	0.00001%	max.
Sulfate (SO <sub>4</sub> )	0.03% max.	Nickel (Ni)	0.001%	max.
Iron oxide (Fe <sub>2</sub> O <sub>3</sub> )	0.001% max.	Potassium (K)	0.02%	max.

Cat No.	Package	Size
AR1332-P20L	Plastic	20 Litre

## SODIUM HYDROXIDE 35% SOLUTION

**NaOH**

NaOH	FW. 40.00	Density 1 L =	1.38 Kg.
CAS-No.	1310-73-2		
UN No.	1824		
EC No.	215-185-5	EC-Index-No	011-002-00-6
Class	8	Packaging Group	II
GHS:	H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406		



### Sodium Hydroxide 35% Solution, AR

Code AR1169

#### Specifications

Assay (by acidimetry)	35.0%	max.
Sodium carbonate (Na <sub>2</sub> CO <sub>3</sub> )	0.5%	max.
Ammonium (NH <sub>4</sub> )	20	ppm max.
Chloride (Cl)	20	ppm max.
Nitrate (NO <sub>3</sub> )	20	ppm max.
Phosphate (PO <sub>4</sub> )	5	ppm max.
Sulfate (SO <sub>4</sub> )	10	ppm max.
Aluminium (Al)	0.5	ppm max.
Calcium (Ca)	0.5	ppm max.

Chromium (Cr)	1	ppm max.
Copper (Cu)	5	ppm max.
Iron (Fe)	1	ppm max.
Lead (Pb)	0.5	ppm max.
Magnesium (Mg)	0.5	ppm max.
Nickel (Ni)	1	ppm max.
Potassium (K)	500	ppm max.
Silicon (Si)	10	ppm max.
Zinc (Zn)	0.5	ppm max.

Cat No.	Package	Size
AR1169-P4L	Plastic	4 Litre

Cat No.	Package	Size
AR1169-P20L	Plastic	20 Litre

## SODIUM HYDROXIDE 40% SOLUTION

**NaOH**

NaOH	FW. 40.00	Density 1 L =	1.43 Kg.
CAS-No.	1310-73-2		

### Sodium Hydroxide 40% Solution, AR

Code AR1374

#### Specifications

Assay (by acidimetry)	40 ± 0.5%	
Sodium carbonate (Na <sub>2</sub> CO <sub>3</sub> )	0.5%	max.
Chloride (Cl)	20	ppm max.
Phosphate (PO <sub>4</sub> )	5	ppm max.
Sulfate (SO <sub>4</sub> )	10	ppm max.
Aluminium (Al)	0.5	ppm max.
Calcium (Ca)	0.5	ppm max.
Chromium (Cr)	1	ppm max.

Copper (Cu)	5	ppm max.
Iron (Fe)	1	ppm max.
Lead (Pb)	0.5	ppm max.
Magnesium (Mg)	0.5	ppm max.
Nickel (Ni)	1	ppm max.
Potassium (K)	500	ppm max.
Silicon (Si)	10	ppm max.
Zinc (Zn)	0.5	ppm max.

Cat No.	Package	Size
AR1374-P1L	Plastic	1 Litre



## SODIUM HYDROXIDE 48% SOLUTION

### NaOH

NaOH	FW. 40.00	Density 1 L =	1.53 Kg.
CAS-No.	1310-73-2		
UN No.	1824		
EC No.	215-185-5	EC-Index-No	011-002-00-6
Class	8	Packaging Group	II
GHS:	H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406		



### Sodium Hydroxide 48% Solution, AR

Code AR1170

#### Specifications

Assay (by acidimetry)	47.0 - 49.0%	
Sodium carbonate (Na <sub>2</sub> CO <sub>3</sub> )	0.5%	max.
Ammonium (NH <sub>4</sub> )	20	ppm max.
Chloride (Cl)	20	ppm max.
Nitrate (NO <sub>3</sub> )	20	ppm max.
Phosphate (PO <sub>4</sub> )	5	ppm max.
Sulfate (SO <sub>4</sub> )	10	ppm max.
Aluminium (Al)	0.5	ppm max.
Calcium (Ca)	0.5	ppm max.

Chromium (Cr)	1	ppm max.
Copper (Cu)	5	ppm max.
Iron (Fe)	1	ppm max.
Lead (Pb)	0.5	ppm max.
Magnesium (Mg)	0.5	ppm max.
Nickel (Ni)	1	ppm max.
Potassium (K)	500	ppm max.
Silicon (Si)	10	ppm max.
Zinc (Zn)	0.5	ppm max.

Cat No.	Package	Size
AR1170-P4L	Plastic	4 Litre

Cat No.	Package	Size
AR1170-P20L	Plastic	20 Litre

## SODIUM NITRITE

### NaNO<sub>2</sub>

NaNO <sub>2</sub>	FW. 69.00	Density =	2.1 g/cm <sup>3</sup>
CAS-No.	7632-00-0	Melting Point	280 °C
UN No.	1500	Boiling Point	320 °C
EC No.	231-555-9	EC-Index-No	007-010-004
Class	6.1	Packaging Group	III
GHS:	H272, H301, H319, H400; P210, P220, P264, P270, P273, P280, P301 + P310, P305 + P351 + P338, P330, P337 + P313, P391, P405		



### Sodium Nitrite, AR

Code AR1175

#### Specifications

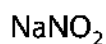
Description	A pale yellow crystalline powder	
Assay	98.0%	min.
Insoluble matter	0.003%	max.
Chloride (Cl)	0.005%	max.
Sulfate (SO <sub>4</sub> )	0.005%	max.
Arsenic (As)	0.00004%	max.

Calcium (Ca)	0.002%	max.
Copper (Cu)	0.0005%	max.
Iron (Fe)	0.001%	max.
Lead (Pb)	0.0005%	max.
Magnesium (Mg)	0.002%	max.
Potassium (K)	0.001%	max.

Cat No.	Package	Size
AR1175-P500G	Plastic	500 G
AR1175-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1175-P5KG	Plastic	5 KG
AR1175-P25KG	Plastic	25 KG

## SODIUM NITRATE



NaNO <sub>2</sub>	FW. 84.99	Density =	2.26 g/cm <sup>3</sup>
CAS-No.	7631-99-4	Melting Point	308 °C
UN No.	1498		
EC No.	231-554-3		
Class	5.1	Packaging Group	III
GHS:	H272, H319; P210, P220, P264, P280, P305 + P351 + P338, P337 + P313,		



### Sodium Nitrate, AR

Code AR1249

#### Specifications

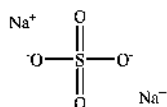
Assay (on dried substance)	99.5%	min.
Appearance	White, fine crystalline powder	
Water	1%	max.
Substances insoluble in water	0.01%	max.
Chlorate and Perchlorate (Cl)	0.006%	max.
Chloride (Cl)	0.005%	max.
Nitrite (NO <sub>2</sub> )	0.0005%	max.

Phosphate (PO <sub>4</sub> )	0.001%	max.
Sulfate (SO <sub>4</sub> )	0.02%	max.
Heavy metals (as Pb)	0.001%	max.
Calcium (Ca)	0.004%	max.
Iron (Fe)	0.001%	max.
Magnesium (Mg)	0.003%	max.

Cat No.	Package	Size
AR1249-P500G	Plastic	500 G
AR1249-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1249-P5KG	Plastic	5 KG
AR1249-P25KG	Plastic	25 KG

## SODIUM SULFATE ANHYDROUS



Na <sub>2</sub> SO <sub>4</sub>	FW. 142.04	Density =	2.70 g/cm <sup>3</sup>
CAS-No.	7757-82-6	Melting Point	888 °C
EC No.	231-820-9		

### Sodium Sulfate Anhydrous, AR

Code AR1176

#### Specifications

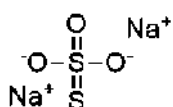
Description	A white crystalline powder	
Assay	99.0%	min.
pH (5% Water)	5.0 - 8.0	
Loss on drying at 800 °C	0.5%	max.
Substances precipitated with ammonium hydroxide, oxalate & phosphate (as oxide)	0.02%	max.
Total Nitrogen (N)	0.0005%	max.
Chloride (Cl)	0.001%	max.

Phosphate (PO <sub>4</sub> )	0.002%	max.
Heavy metals (as Pb)	0.0005%	max.
Arsenic (As)	0.0001%	max.
Calcium (Ca)	0.005%	max.
Iron (Fe)	0.0005%	max.
Magnesium (Mg)	0.001%	max.
Potassium (K)	0.01%	max.

Cat No.	Package	Size
AR1176-P500G	Plastic	500 G
AR1176-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1176-P5KG	Plastic	5 KG
AR1176-P25KG	Plastic	25 KG

## SODIUM THIOSULFATE 0.1N



CAS-No.

7772-98-7

EC No.

231-867-5

### Sodium thiosulfate, 0.1N

Code GN1178

#### Specifications

Appearance: Clear, colorless solution

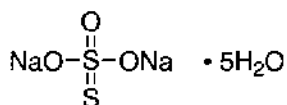
Normality: 0.1000N ± 0.0005N

Traceable to NIST

Cat No.	Package	Size
GN1178-P500M	Plastic	500 ML
GN1178-P1L	Plastic	1 Litre

Cat No.	Package	Size
GN1178-P2.5L	Plastic	2.5 Litre
GN1178-P4L	Plastic	4 Litre

## SODIUM THIOSULFATE PENTAHYDRATE



$\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$

FW. 248.21

CAS-No.

10102-17-7

EC No.

231-867-5

Density =

1.74 g/cm<sup>3</sup>

Melting Point

48 C°

### Sodium Thiosulfate Pentahydrate, AR

Code AR1177

#### Specifications

Description	Colorless crystalline powder	
Assay	99.5 - 100.5%	
Reaction	pH 5.5 - 7.5	
Insoluble matter	0.003%	max.
Nitrogen Compound (N)	0.005%	max.
Chloride (Cl)	0.005%	max.
Sulfate & Sulfite (SO <sub>4</sub> )	0.03%	max.

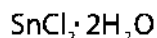
Sulfide (S)	0.0002%	max.
Calcium (Ca)	0.002%	max.
Copper (Cu)	0.0005%	max.
Iron (Fe)	0.0005%	max.
Lead (Pb)	0.0005%	max.
Magnesium (Mg)	0.001%	max.
Potassium (K)	0.001%	max.

Cat No.	Package	Size
AR1177-P500G	Plastic	500 G
AR1177-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1177-P5KG	Plastic	5 KG
AR1177-P25KG	Plastic	25 KG



## STANNOUS(II) CHLORIDE DIHYDRATE



SnCl <sub>2</sub> ·2H <sub>2</sub> O	FW. 225.63	Density =	2.71 g/cm <sup>3</sup>
CAS-No.	10025-69-1	Melting Point	38 °C
UN No.	3260	Boiling Point	623 °C
EC No.	231-868-0		
Class	8	Packaging Group	III
GHS:	H302+H332, H314, H317, H373, H410; P260, P264, P270, P272, P273, P280, P301+P312, P301+P330+P331, P302+P352, P303+P361+P353, P304+P340, P305+P351+P338, P310, P330, P333+P313, P363,		



### Stannous (II) Chloride Dihydrate, AR

Code AR1179

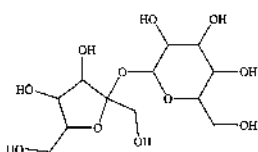
#### Specifications

Description	Colorless crystals	Arsenic (As)	0.0001%	max.
Assay	98.0% min.	Copper (Cu)	0.001%	max.
Substances not precipitated by H <sub>2</sub> S (as SO <sub>4</sub> )	0.05% max.	Iron (Fe)	0.002%	max.
Ammonium (NH <sub>4</sub> )	0.002% max.	Lead (Pb)	0.005%	max.
Sulfate (SO <sub>4</sub> )	0.002% max.			

Cat No.	Package	Size
AR1179-P500G	Plastic	500 G
AR1179-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1179-P5KG	Plastic	5 KG
AR1179-P25KG	Plastic	25 KG

## SUCROSE



C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>	FW. 342.30	Melting Point	169 - 170 °C
CAS-No.	57-50-1		
EC No.	200-334-9		

### Sucrose, AR

Code AR1180

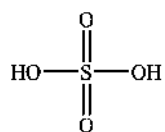
#### Specifications

Description	Colorless crystalline powder	Chloride (Cl)	0.0005%	max.
Specific rotation (α) 20 °C (10% aqueous solution)	+66.4° to +66.6°	Sulfated ash	0.005%	max.
Loss on drying at 100 °C	0.05% max.	Sulfate (SO <sub>4</sub> )	0.002%	max.
Insoluble matter	0.003% max.	Copper (Cu)	0.0001%	max.
Reducing sugars (C <sub>6</sub> H <sub>12</sub> O <sub>6</sub> )	0.01% max.	Iron (Fe)	0.0001%	max.
Nitrogen Compound (N)	0.002% max.	Lead (Pb)	0.0001%	max.

Cat No.	Package	Size
AR1180-P500G	Plastic	500 G
AR1180-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1180-P5KG	Plastic	5 KG
AR1180-P25KG	Plastic	25 KG

## SULFURIC ACID 0.1N - 1.0N



CAS-No.	7664-93-9	EC-Index-No	016-020-00-8
UN No.	3264	Packaging Group	III
EC No.	231-639-5		
Class	8		
GHS:	H290; P234, P390, P406		



### Sulfuric acid, 0.1N

Code GN1194

#### Specifications

Appearance	Clear, colorless solution	Normality	0.1000N ± 0.0005N
------------	---------------------------	-----------	-------------------

Traceable to NIST

Cat No.	Package	Size
GN1194-P500ML	Plastic	500 ML
GN1194-P1L	Plastic	1 Litre

Cat No.	Package	Size
GN1194-P2.5L	Plastic	2.5 Litre
GN1194-P4L	Plastic	4 Litre

### Sulfuric acid, 0.2N

Code GN1195

#### Specifications

Appearance	Clear, colorless solution	Normality	0.2000N ± 0.0005N
------------	---------------------------	-----------	-------------------

Traceable to NIST

Cat No.	Package	Size
GN1195-P500ML	Plastic	500 ML
GN1195-P1L	Plastic	1 Litre

Cat No.	Package	Size
GN1195-P2.5L	Plastic	2.5 Litre
GN1195-P4L	Plastic	4 Litre

### Sulfuric acid, 0.4N

Code GN1196

#### Specifications

Appearance	Clear, colorless solution	Normality	0.4000N ± 0.0005N
------------	---------------------------	-----------	-------------------

Traceable to NIST

Cat No.	Package	Size
GN1196-P500ML	Plastic	500 ML
GN1196-P1L	Plastic	1 Litre

Cat No.	Package	Size
GN1196-P2.5L	Plastic	2.5 Litre
GN1196-P4L	Plastic	4 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Sulfuric acid, 1.0N

Code GN1197

### Specifications

Appearance	Clear, colorless solution
------------	---------------------------

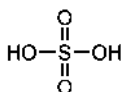
Normality	1.000N ± 0.005N
-----------	-----------------

Traceable to NIST

Cat No.	Package	Size
GN1197-P500ML	Plastic	500 ML
GN1197-P1L	Plastic	1 Litre

Cat No.	Package	Size
GN1197-P2.5L	Plastic	2.5 Litre
GN1197-P4L	Plastic	4 Litre

## SULFURIC ACID 5%



H<sub>2</sub>SO<sub>4</sub> FW. 98.08  
CAS-No. 7664-93-9

Density 1 L = 1.03 kg.  
Melting Point ~ 0 °C  
Boiling Point ~ 100 °C

GHS: H290, H315, H319, P234, P264, P280, P302 + P352, P305 + P351 + P338, P332 + P313, P337 + P313, P362 + P364, P390, P406

## Sulfuric Acid 5%, AR

Code AR1362

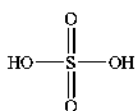
### Specifications

Assay (by acidimetry)	5.0 - 6.0%
Appearance	Passes test
Color (APHA)	10 max.
Residue after Ignition	5.0 ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2.0 ppm max.
Ammonium (NH <sub>4</sub> )	1.0 ppm max.

Chloride (Cl)	0.1	ppm max.
Nitrate (NO <sub>3</sub> )	0.5	ppm max.
Heavy metals (as Pb)	0.5	ppm max.
Arsenic and Antimony (as As)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.
Nickel (Ni)	0.2	ppm max.

Cat No.	Package	Size
AR1362-P20L	Plastic	20 Litre

## SULFURIC ACID 50%



H<sub>2</sub>SO<sub>4</sub> FW. 98.08  
CAS-No. 7664-93-9  
UN No. 2796  
EC No. 231-639-5  
Class 8

Density 1 L = 1.39 kg.  
Boiling Point 123.3 °C  
Melting Point -36.5 °C  
EC-Index-No 016-020-00-8  
Packaging Group II



GHS: H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406

## Sulfuric Acid 50%, AR

Code AR1184

### Specifications

Assay (by acidimetry)	49.0 - 51.0%
Appearance	Passes test
Color (APHA)	10 max.
Residue after Ignition	5.0 ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2.0 ppm max.
Ammonium (NH <sub>4</sub> )	1.0 ppm max.

Chloride (Cl)	0.1	ppm max.
Nitrate (NO <sub>3</sub> )	0.5	ppm max.
Heavy metals (as Pb)	0.5	ppm max.
Arsenic and Antimony (as As)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.
Nickel (Ni)	0.2	ppm max.

Cat No.	Package	Size
AR1184-G500ML	Amber Glass	500 ML
AR1184-G1L	Amber Glass	1 Litre
AR1184-G2.5L	Amber Glass	2.5 Litre
AR1184-P2.5L	Plastic	2.5 Litre
AR1184-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
AR1184-P4L	Plastic	4 Litre
AR1184-P20KG	Plastic	20 KG
AR1184-P25KG	Plastic	25 KG
AR1184-P30KG	Plastic	30 KG

## Sulfuric Acid 50%, Semig

Code SM1184

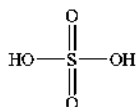
## Specifications

Assay (by acidimetry)	49.0 - 51.0%	Copper (Cu)	0.1	ppm max.
Color (APHA)	10 max.	Gold (Au)	0.3	ppm max.
Residue after Ignition	5 ppm max.	Iron (Fe)	0.2	ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2 ppm max.	Lead (Pb)	0.3	ppm max.
Ammonium (NH <sub>4</sub> )	0.5 ppm max.	Magnesium (Mg)	0.3	ppm max.
Chloride (Cl)	0.1 ppm max.	Manganese (Mn)	0.2	ppm max.
Nitrate (NO <sub>3</sub> )	0.5 ppm max.	Nickel (Ni)	0.1	ppm max.
Phosphate (PO <sub>4</sub> )	0.5 ppm max.	Potassium (K)	0.3	ppm max.
Aluminium (Al)	0.2 ppm max.	Sodium (Na)	0.3	ppm max.
Arsenic and Antimony (as As)	0.005 ppm max.	Tin (Sn)	0.2	ppm max.
Boron (B)	0.02 ppm max.	Titanium (Ti)	0.3	ppm max.
Calcium (Ca)	0.3 ppm max.	Zinc (Zn)	0.2	ppm max.
Chromium (Cr)	0.2 ppm max.			

Cat No.	Package	Size
SM1184-G500ML	Amber Glass	500 ML
SM1184-G1L	Amber Glass	1 Litre
SM1184-G2.5L	Amber Glass	2.5 Litre
SM1184-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1184-G4L	Amber Glass	4 Litre
SM1184-P4L	Plastic	4 Litre
SM1184-P20KG	Plastic	20 KG

## SULFURIC ACID 60%



H<sub>2</sub>SO<sub>4</sub> FW. 98.08  
 CAS-No. 7664-93-9  
 UN No. 1830  
 EC No. 231-639-5  
 Class 8

Density 1 L = 1.49 kg.  
 Boiling Point 140 °C  
 Melting Point -28.7 °C  
 EC-Index-No 016-020-00-8  
 Packaging Group II



GHS: H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406

## Sulfuric Acid 60%, AR

Code AR1185

## Specifications

Assay (by acidimetry)	60% min.	Heavy metals (as Pb)	0.5	ppm max.
Appearance	Passes test	Arsenic and Antimony (as As)	0.01	ppm max.
Color (APHA)	10 max.	Cadmium (Cd)	0.01	ppm max.
Residue after Ignition	5.0 ppm max.	Iron (Fe)	0.2	ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2.0 ppm max.	Lead (Pb)	0.01	ppm max.
Ammonium (NH <sub>4</sub> )	1.0 ppm max.	Mercury (Hg)	0.005	ppm max.
Chloride (Cl)	0.1 ppm max.	Nickel (Ni)	0.2	ppm max.
Nitrate (NO <sub>3</sub> )	0.5 ppm max.	Zinc (Zn)	0.02	ppm max.

Cat No.	Package	Size
AR1185-G500ML	Amber Glass	500 ML
AR1185-G1L	Amber Glass	1 Litre
AR1185-G2.5L	Amber Glass	2.5 Litre
AR1185-P2.5L	Plastic	2.5 Litre
AR1185-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
AR1185-P4L	Plastic	4 Litre
AR1185-P20KG	Plastic	20 KG
AR1185-P25KG	Plastic	25 KG
AR1185-P30KG	Plastic	30 KG

## Sulfuric Acid 60%, Semig

Code SM1185

### Specifications

Assay (by acidimetry)	60.0 - 61.0%	
Color (APHA)	10	max.
Residue after Ignition	5	ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2	ppm max.
Ammonium (NH <sub>4</sub> )	0.5	ppm max.
Chloride (Cl)	0.1	ppm max.
Nitrate (NO <sub>3</sub> )	0.5	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.
Aluminium (Al)	0.2	ppm max.
Arsenic and Antimony (as As)	0.005	ppm max.
Boron (B)	0.02	ppm max.
Calcium (Ca)	0.3	ppm max.
Chromium (Cr)	0.2	ppm max.

Copper (Cu)	0.1	ppm max.
Gold (Au)	0.3	ppm max.
Iron (Fe)	0.2	ppm max.
Lead (Pb)	0.3	ppm max.
Magnesium (Mg)	0.3	ppm max.
Manganese (Mn)	0.2	ppm max.
Nickel (Ni)	0.1	ppm max.
Potassium (K)	0.3	ppm max.
Sodium (Na)	0.3	ppm max.
Tin (Sn)	0.2	ppm max.
Titanium (Ti)	0.3	ppm max.
Zinc (Zn)	0.2	ppm max.

Cat No.	Package	Size
SM1185-G500ML	Amber Glass	500 ML
SM1185-G1L	Amber Glass	1 Litre
SM1185-G2.5L	Amber Glass	2.5 Litre
SM1185-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1185-G4L	Amber Glass	4 Litre
SM1185-P4L	Plastic	4 Litre
SM1185-P20KG	Plastic	20 KG

## Sulfuric Acid 60%, Electropure

Code EP1185

### Specifications

Assay (by acidimetry)	60.0%	min.
Color (APHA)	10	max.
Residue after Ignition	3	ppm max.
Substance reducing permanganate (as SO <sub>2</sub> )	2	ppm max.
Ammonium (NH <sub>4</sub> )	2	ppm max.
Chloride (Cl)	0.1	ppm max.
Nitrate (NO <sub>3</sub> )	0.2	ppm max.
Phosphate (PO <sub>4</sub> )	0.3	ppm max.
Aluminium (Al)	0.05	ppm max.
Arsenic and Antimony (as As)	0.005	ppm max.
Barium (Ba)	0.05	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.1	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.1	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.01	ppm max.
Gallium (Ga)	0.02	ppm max.
Germanium (Ge)	0.1	ppm max.
Gold (Au)	0.02	ppm max.

Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Molybdenum (Mo)	0.05	ppm max.
Nickel (Ni)	0.02	ppm max.
Potassium (K)	0.1	ppm max.
Silicon (Si)	0.1	ppm max.
Silver (Ag)	0.02	ppm max.
Sodium (Na)	0.1	ppm max.
Strontium (Sr)	0.05	ppm max.
Thallium (Tl)	0.05	ppm max.
Tin (Sn)	0.05	ppm max.
Titanium (Ti)	0.05	ppm max.
Vanadium (V)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.
Zirconium (Zr)	0.1	ppm max.

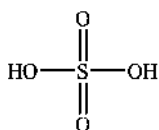
Particle/ml :		
0.5 µm and greater (drums)	150	max.
1.0 µm and greater (drums)	25	max.

Cat No.	Package	Size
EP1185-G500ML	Amber Glass	500 ML
EP1185-G1L	Amber Glass	1 Litre
EP1185-G2.5L	Amber Glass	2.5 Litre
EP1185-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
EP1185-G4L	Amber Glass	4 Litre
EP1185-P4L	Plastic	4 Litre
EP1185-P30KG	Plastic	30 KG



## SULFURIC ACID 62.5%



H <sub>2</sub> SO <sub>4</sub>	FW. 98.08	Density 1 L =	1.52 Kg.
CAS-No.	7664-93-9	Melting Point	- 33.4 °C
		Boiling Point	145.8 °C
GHS:	H290, H314, P234, P260, P264, P280, P301+P330+P331, P303+P361+P353, P304+P340, P305+P351+P338, P310, P363, P390, P405, P406		

### Sulfuric Acid 62.5%, AR

Code AR1330

#### Specifications

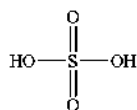
Assay (by acidimetry)	62.25 - 62.75%
Appearance	Passes test
Color (APHA)	10 max.
Residue after Ignition	5.0 ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2.0 ppm max.

Chloride (Cl)	0.1	ppm max.
Heavy metals (as Pb)	0.5	ppm max.
Arsenic and Antimony (as As)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.
Nickel (Ni)	0.2	ppm max.

Cat No.	Package	Size
AR1330-P20KG	Plastic	20 KG
AR1330-P25KG	Plastic	25 KG

Cat No.	Package	Size
AR1330-P30KG	Plastic	30 KG

## SULFURIC ACID 81%



H <sub>2</sub> SO <sub>4</sub>	FW. 98.08	Density 1 L =	1.74 kg.
CAS-No.	7664-93-9	Boiling Point	210 °C
UN No.	1830	Melting Point	2.5 °C
EC No.	231-639-5	EC-Index-No	016-020-00-8
Class	8	Packaging Group	II



GHS: H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406

### Sulfuric Acid 81%, VLSI

Code VL1151

#### Specifications

Assay (by acidimetry)	81 - 82%
Color (APHA)	10 max.
Residue after Ignition	3 ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	1 ppm max.
Ammonium (NH <sub>4</sub> )	0.5 ppm max.
Chloride (Cl)	0.1 ppm max.
Nitrate (NO <sub>3</sub> )	0.2 ppm max.
Phosphate (PO <sub>4</sub> )	0.2 ppm max.
Aluminium (Al)	50 ppb max.
Arsenic and Antimony (as As)	5 ppb max.
Barium (Ba)	50 ppb max.
Beryllium (Be)	20 ppb max.
Bismuth (Bi)	50 ppb max.
Boron (B)	20 ppb max.
Cadmium (Cd)	10 ppb max.
Calcium (Ca)	200 ppb max.
Chromium (Cr)	20 ppb max.
Cobalt (Co)	20 ppb max.
Copper (Cu)	10 ppb max.
Gallium (Ga)	20 ppb max.
Germanium (Ge)	100 ppb max.
Gold (Au)	100 ppb max.

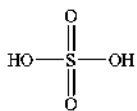
Indium (In)	20	ppb max.
Iron (Fe)	100	ppb max.
Lead (Pb)	10	ppb max.
Lithium (Li)	20	ppb max.
Magnesium (Mg)	50	ppb max.
Manganese (Mn)	20	ppb max.
Molybdenum (Mo)	50	ppb max.
Nickel (Ni)	20	ppb max.
Platinum (Pt)	100	ppb max.
Potassium (K)	100	ppb max.
Silver (Ag)	20	ppb max.
Sodium (Na)	200	ppb max.
Strontium (Sr)	10	ppb max.
Thallium (Tl)	50	ppb max.
Tin (Sn)	100	ppb max.
Titanium (Ti)	100	ppb max.
Vanadium (V)	50	ppb max.
Zinc (Zn)	20	ppb max.
Zirconium (Zr)	100	ppb max.

Product passed through 1 micron final filter.

Cat No.	Package	Size
VL1151-G500ML	Amber Glass	500 ML
VL1151-G1L	Amber Glass	1 Litre
VL1151-G2.5L	Amber Glass	2.5 Litre
VL1151-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
VL1151-G4L	Amber Glass	4 Litre
VL1151-P4L	Plastic	4 Litre
VL1151-P20L	Plastic	20 Litre
VL1151-P200L	Plastic	200 Litre

## SULFURIC ACID 89%



H <sub>2</sub> SO <sub>4</sub>	FW. 98.08	Density 1 L =	1.81 Kg.
CAS-No.	7664-93-9	Melting Point	-1.5 °C
UN No.	1830	Boiling Point	256 °C
EC No.	231-639-5	EC-Index-No	016-020-00-8
Class	8	Packaging Group	II



GHS: H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406

### Sulfuric Acid 89%, Semig

Code SM1189

#### Specifications

Assay (by acidimetry)	89.0 - 91.0%	Gold (Au)	0.3	ppm max.
Color (APHA)	10 max.	Iron (Fe)	0.1	ppm max.
Residue after Ignition	3 ppm max.	Lead (Pb)	0.1	ppm max.
Chloride (Cl)	0.1 ppm max.	Magnesium (Mg)	0.3	ppm max.
Nitrate (NO <sub>3</sub> )	0.2 ppm max.	Manganese (Mn)	0.2	ppm max.
Phosphate (PO <sub>4</sub> )	0.5 ppm max.	Nickel (Ni)	0.1	ppm max.
Aluminium (Al)	0.2 ppm max.	Potassium (K)	0.3	ppm max.
Arsenic (As)	0.005 ppm max.	Sodium (Na)	0.3	ppm max.
Boron (B)	0.02 ppm max.	Tin (Sn)	0.2	ppm max.
Calcium (Ca)	0.3 ppm max.	Titanium (Ti)	0.3	ppm max.
Chromium (Cr)	0.2 ppm max.	Zinc (Zn)	0.2	ppm max.
Copper (Cu)	0.1 ppm max.			

Cat No.	Package	Size
SM1189-G500ML	Amber Glass	500 ML
SM1189-G1L	Amber Glass	1 Litre
SM1189-G2.5L	Amber Glass	2.5 Litre
SM1189-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1189-G4L	Amber Glass	4 Litre
SM1189-P4L	Plastic	4 Litre
SM1189-P20L	Plastic	20 Litre



## Sulfuric Acid 89%, Electro Extra

Code EX1189

## Specifications

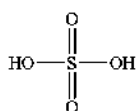
Assay (by acidimetry)	89.0 - 91.0%
Color (APHA)	3 max.
Residue after Ignition	3 ppm max.
Chloride (Cl)	0.05 ppm max.
Nitrate (NO <sub>3</sub> )	0.1 ppm max.
Phosphate (PO <sub>4</sub> )	0.1 ppm max.
Aluminium (Al)	0.02 ppm max.
Arsenic and Antimony (as As)	0.005 ppm max.
Barium (Ba)	0.01 ppm max.
Beryllium (Be)	0.01 ppm max.
Bismuth (Bi)	0.01 ppm max.
Boron (B)	0.01 ppm max.
Cadmium (Cd)	0.01 ppm max.
Calcium (Ca)	0.2 ppm max.
Chromium (Cr)	0.02 ppm max.
Cobalt (Co)	0.01 ppm max.
Copper (Cu)	0.01 ppm max.
Gallium (Ga)	0.01 ppm max.
Germanium (Ge)	0.05 ppm max.
Gold (Au)	0.05 ppm max.

Indium (In)	0.01 ppm max.
Iron (Fe)	0.1 ppm max.
Lead (Pb)	0.01 ppm max.
Lithium (Li)	0.01 ppm max.
Magnesium (Mg)	0.05 ppm max.
Manganese (Mn)	0.01 ppm max.
Molybdenum (Mo)	0.05 ppm max.
Nickel (Ni)	0.01 ppm max.
Platinum (Pt)	0.01 ppm max.
Potassium (K)	0.1 ppm max.
Silver (Ag)	0.01 ppm max.
Sodium (Na)	0.5 ppm max.
Strontium (Sr)	0.01 ppm max.
Thallium (Tl)	0.01 ppm max.
Tin (Sn)	0.01 ppm max.
Titanium (Ti)	0.1 ppm max.
Vanadium (V)	0.05 ppm max.
Zinc (Zn)	0.1 ppm max.
Zirconium (Zr)	0.05 ppm max.

Cat No.	Package	Size
EX1189-G500ML	Amber Glass	500 ML
EX1189-G1L	Amber Glass	1 Litre
EX1189-G2.5L	Amber Glass	2.5 Litre
EX1189-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
EX1189-G4L	Amber Glass	4 Litre
EX1189-P4L	Plastic	4 Litre
EX1189-P30KG	Plastic	30 KG

## SULFURIC ACID 96%



H <sub>2</sub> SO <sub>4</sub>	FW. 98.08
CAS-No.	7664-93-9
UN No.	1830
EC No.	231-639-5
Class	8

Density 1 L =	1.84 kg.
Melting Point	-11.1 °C
Boiling Point	310 °C
EC-Index-No	016-020-00-8
Packaging Group	II



GHS: H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406

## Sulfuric Acid 96%, AR

Code AR1191

## Specifications

(Meet A.C.S. Specifications)

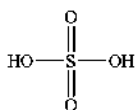
Assay (by acidimetry)	95.0 - 98.0%
Appearance	Clear colorless liquid
Color (APHA)	10 max.
Residue after Ignition	5.0 ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2.0 ppm max.
Ammonium (NH <sub>4</sub> )	1.0 ppm max.
Chloride (Cl)	0.1 ppm max.
Nitrate (NO <sub>3</sub> )	0.5 ppm max.

Heavy metals (as Pb)	0.5 ppm max.
Arsenic and Antimony (as As)	0.01 ppm max.
Cadmium (Cd)	0.01 ppm max.
Iron (Fe)	0.2 ppm max.
Lead (Pb)	0.01 ppm max.
Mercury (Hg)	0.005 ppm max.
Nickel (Ni)	0.2 ppm max.
Zinc (Zn)	0.02 ppm max.

Cat No.	Package	Size
AR1191-G500ML	Amber Glass	500 ML
AR1191-G1L	Amber Glass	1 Litre
AR1191-G2.5L	Amber Glass	2.5 Litre
AR1191-P2.5L	Plastic	2.5 Litre
AR1191-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
AR1191-P4L	Plastic	4 Litre
AR1191-P20KG	Plastic	20 KG
AR1191-P25KG	Plastic	25 KG
AR1191-P30KG	Plastic	30 KG

## SULFURIC ACID 96%



H<sub>2</sub>SO<sub>4</sub> FW. 98.08  
 CAS-No. 7664-93-9  
 UN No. 1830  
 EC No. 231-639-5  
 Class 8

Density 1 L = 1.84 kg.  
 Melting Point -11.1 °C  
 Boiling Point 310 °C  
 EC-Index-No 016-020-00-8  
 Packaging Group II



GHS: H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406

### Sulfuric Acid 96%, AR

Code AR1191

#### Specifications

Assay (by acidimetry)	95.0 - 98.0%
Appearance	Clear colorless liquid
Color (APHA)	10 max.
Residue after Ignition	5.0 ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2.0 ppm max.
Ammonium (NH <sub>4</sub> )	1.0 ppm max.
Chloride (Cl)	0.1 ppm max.
Nitrate (NO <sub>3</sub> )	0.5 ppm max.

#### (Meet A.C.S. Specifications)

Heavy metals (as Pb)	0.5 ppm max.
Arsenic and Antimony (as As)	0.01 ppm max.
Cadmium (Cd)	0.01 ppm max.
Iron (Fe)	0.2 ppm max.
Lead (Pb)	0.01 ppm max.
Mercury (Hg)	0.005 ppm max.
Nickel (Ni)	0.2 ppm max.
Zinc (Zn)	0.02 ppm max.

Cat No.	Package	Size
AR1191-G500ML	Amber Glass	500 ML
AR1191-G1L	Amber Glass	1 Litre
AR1191-G2.5L	Amber Glass	2.5 Litre
AR1191-P2.5L	Plastic	2.5 Litre
AR1191-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
AR1191-P4L	Plastic	4 Litre
AR1191-P20KG	Plastic	20 KG
AR1191-P25KG	Plastic	25 KG
AR1191-P30KG	Plastic	30 KG

### Sulfuric Acid 96%, AR

Code AR1341

#### Specifications

Assay (by acidimetry)	95.0 - 98.0%
Appearance	Passes test
Color (APHA)	10 max.
Residue after Ignition	5.0 ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2.0 ppm max.
Ammonium (NH <sub>4</sub> )	1.0 ppm max.
Chloride (Cl)	0.1 ppm max.
Nitrate (NO <sub>3</sub> )	0.5 ppm max.
Heavy metals (as Pb)	0.5 ppm max.

#### (Meet A.C.S. Specifications)

Arsenic and Antimony (as As)	0.01 ppm max.
Cadmium (Cd)	0.01 ppm max.
Iron (Fe)	0.2 ppm max.
Lead (Pb)	0.01 ppm max.
Mercury (Hg)	0.005 ppm max.
Nickel (Ni)	0.2 ppm max.
Zinc (Zn)	0.02 ppm max.

Application test (Phenol-Sulfuric Acid Method) Passes test

Cat No.	Package	Size
AR1341-G500ML	Amber Glass	500 ML
AR1341-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AR1341-G2.5L	Amber Glass	2.5 Litre
AR1341-G4L	Amber Glass	4 Litre

## Sulfuric Acid 96%, RCI Premium

Code RP1191

## Specifications

(Meet A.C.S. Specifications)

Assay ( by acidimetry )	95.0 - 97.0%
Appearance	Passes test
Color (APHA)	10 max.
Residue after ignition	0.0004% max.
Ammonium (NH <sub>4</sub> )	0.0001% max.
Chloride (Cl)	0.00001% max.
Nitrate (NO <sub>3</sub> )	0.00002% max.
Phosphate (PO <sub>4</sub> )	0.00005% max.
Substance Reducing KMnO <sub>4</sub> (as SO <sub>2</sub> )	0.0002% max.
Heavy metal (as Pb)	0.00005% max.
Aluminium (Al)	0.00001% max.
Arsenic (As)	0.0000004% max.
Barium (Ba)	0.000005% max.
Boron (B)	0.000001% max.
Cadmium (Cd)	0.000001% max.
Calcium (Ca)	0.00002% max.
Chromium (Cr)	0.00001% max.

Cobalt (Co)	0.000002%	max.
Copper (Cu)	0.000002%	max.
Gold (Au)	0.00001%	max.
Iron (Fe)	0.00002%	max.
Lead (Pb)	0.000001%	max.
Magnesium (Mg)	0.00002%	max.
Manganese (Mn)	0.000002%	max.
Molybdenum (Mo)	0.000005%	max.
Mercury (Hg)	0.0000005%	max.
Nickel (Ni)	0.000005%	max.
Potassium (K)	0.00003%	max.
Selenium (Se)	0.0001%	max.
Sodium (Na)	0.00003%	max.
Strontium (Sr)	0.000002%	max.
Tin (Sn)	0.00002%	max.
Titanium (Ti)	0.00002%	max.
inc (Zn)	0.00002%	max.

Cat No.	Package	Size
RP1191-G500ML	Amber Glass	500 ML
RP1191-G1L	Amber Glass	1 Litre
RP1191-G2.5L	Amber Glass	2.5 Litre
RP1191-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
RP1191-G4L	Amber Glass	4 Litre
RP1191-P4L	Plastic	4 Litre
RP1191-P30KG	Plastic	30 KG

## Sulfuric Acid 96%, Semig

Code SM1191

## Specifications

Assay (by acidimetry)	95.0 - 97.0%
Color (APHA)	10 max.
Chloride (Cl)	0.1 ppm max.
Nitrate (NO <sub>3</sub> )	0.2 ppm max.
Phosphate (PO <sub>4</sub> )	0.5 ppm max.
Aluminium (Al)	0.2 ppm max.
Arsenic and Antimony (as As)	0.005 ppm max.
Boron (B)	0.02 ppm max.
Calcium (Ca)	0.3 ppm max.
Chromium (Cr)	0.2 ppm max.
Copper (Cu)	0.1 ppm max.

Gold (Au)	0.3	ppm max.
Iron (Fe)	0.2	ppm max.
Lead (Pb)	0.3	ppm max.
Magnesium (Mg)	0.3	ppm max.
Manganese (Mn)	0.2	ppm max.
Nickel (Ni)	0.1	ppm max.
Potassium (K)	0.3	ppm max.
Sodium (Na)	0.3	ppm max.
Tin (Sn)	0.2	ppm max.
Titanium (Ti)	0.3	ppm max.
Zinc (Zn)	0.2	ppm max.

Cat No.	Package	Size
SM1191-G500ML	Amber Glass	500 ML
SM1191-G1L	Amber Glass	1 Litre
SM1191-G2.5L	Amber Glass	2.5 Litre
SM1191-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1191-G4L	Amber Glass	4 Litre
SM1191-P4L	Plastic	4 Litre
SM1191-P30KG	Plastic	30 KG

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Sulfuric Acid 96%, Low Mercury

Code EP1192

### Specifications

Assay (by acidimetry)	95.0 - 97.0%	
Mercury (Hg)	0.000001%	max
Color (APHA)	10	max.
Residue after Ignition	3	ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2	ppm max.
Ammonium (NH <sub>4</sub> )	2	ppm max.
Chloride (Cl)	0.1	ppm max.
Nitrate (NO <sub>3</sub> )	0.2	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.
Aluminium (Al)	0.05	ppm max.
Arsenic and Antimony (as As)	0.01	ppm max.
Barium (Ba)	0.05	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.1	ppm max.
Boron (B)	0.05	ppm max.
Cadmium (Cd)	0.05	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.01	ppm max.
Gallium (Ga)	0.02	ppm max.

Germanium (Ge)	0.1	ppm max.
Gold (Au)	0.1	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.05	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.05	ppm max.
Nickel (Ni)	0.02	ppm max.
Platinum (Pt)	0.2	ppm max.
Potassium (K)	0.1	ppm max.
Silver (Ag)	0.02	ppm max.
Sodium (Na)	0.5	ppm max.
Strontium (Sr)	0.05	ppm max.
Thallium (Tl)	0.05	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.1	ppm max.
Vanadium (V)	0.05	ppm max.
Zinc (Zn)	0.02	ppm max.
Zirconium (Zr)	0.1	ppm max.

Cat No.	Package	Size
EP1192-G500ML	Amber Glass	500 ML
EP1192-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
EP1192-G2.5L	Amber Glass	2.5 Litre
EP1192-G4L	Amber Glass	4 Litre

## Sulfuric Acid 96%, Electropure

Code EP1191

### Specifications

Assay (by acidimetry)	95.0 - 97.0%	
Color (APHA)	10	max.
Residue after Ignition	3	ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2	ppm max.
Ammonium (NH <sub>4</sub> )	1	ppm max.
Chloride (Cl)	0.1	ppm max.
Nitrate (NO <sub>3</sub> )	0.2	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.
Aluminium (Al)	0.05	ppm max.
Arsenic and Antimony (as As)	0.005	ppm max.
Barium (Ba)	0.05	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.1	ppm max.
Boron (B)	0.02	ppm max.
Cadmium (Cd)	0.01	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.01	ppm max.
Gallium (Ga)	0.02	ppm max.
Germanium (Ge)	0.1	ppm max.

Gold (Au)	0.1	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.01	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.02	ppm max.
Mercury (Hg)	0.005	ppm max.
Molybdenum (Mo)	0.05	ppm max.
Nickel (Ni)	0.02	ppm max.
Platinum (Pt)	0.2	ppm max.
Potassium (K)	0.1	ppm max.
Silver (Ag)	0.02	ppm max.
Sodium (Na)	0.2	ppm max.
Strontium (Sr)	0.05	ppm max.
Thallium (Tl)	0.05	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.1	ppm max.
Vanadium (V)	0.05	ppm max.
Zinc (Zn)	0.02	ppm max.
Zirconium (Zr)	0.1	ppm max.

Cat No.	Package	Size
EP1191-G500ML	Amber Glass	500 ML
EP1191-G1L	Amber Glass	1 Litre
EP1191-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
EP1191-P2.5L	Plastic	2.5 Litre
EP1192-G4L	Amber Glass	4 Litre
EP1191-P4L	Plastic	4 Litre

## Sulfuric Acid 96%, VLSI

Code VL1191

## Specifications

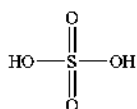
Assay (by acidimetry)	96.0 - 97.0%	Indium (In)	5	ppb max.
Color (APHA)	10 max.	Iron (Fe)	50	ppb max.
Residue after Ignition	3 ppm max.	Lead (Pb)	5	ppb max.
Substances reducing permanganate (as SO <sub>2</sub> )	1 ppm max.	Lithium (Li)	5	ppb max.
Ammonium (NH <sub>4</sub> )	0.5 ppm max.	Magnesium (Mg)	50	ppb max.
Chloride (Cl)	0.1 ppm max.	Manganese (Mn)	5	ppb max.
Nitrate (NO <sub>3</sub> )	0.2 ppm max.	Molybdenum (Mo)	5	ppb max.
Phosphate (PO <sub>4</sub> )	0.2 ppm max.	Nickel (Ni)	5	ppb max.
Aluminium (Al)	20 ppb max.	Platinum (Pt)	10	ppb max.
Arsenic and Antimony (as As)	5 ppb max.	Potassium (K)	100	ppb max.
Barium (Ba)	20 ppb max.	Silver (Ag)	10	ppb max.
Beryllium (Be)	5 ppb max.	Sodium (Na)	100	ppb max.
Bismuth (Bi)	20 ppb max.	Strontium (Sr)	5	ppb max.
Boron (B)	10 ppb max.	Thallium (Tl)	5	ppb max.
Cadmium (Cd)	5 ppb max.	Tin (Sn)	10	ppb max.
Calcium (Ca)	100 ppb max.	Titanium (Ti)	50	ppb max.
Chromium (Cr)	10 ppb max.	Vanadium (V)	50	ppb max.
Cobalt (Co)	5 ppb max.	Zinc (Zn)	20	ppb max.
Copper (Cu)	5 ppb max.	Zirconium (Zr)	5	ppb max.
Gallium (Ga)	5 ppb max.			
Germanium (Ge)	50 ppb max.			
Gold (Au)	20 ppb max.			

Product passed through 1 micron final filter.

Cat No.	Package	Size
VL1191-G500ML	Amber Glass	500 ML
VL1191-G1L	Amber Glass	1 Litre
VL1191-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
VL1191-P2.5L	Plastic	2.5 Litre
VL1191-G4L	Amber Glass	4 Litre
VL1191-P4L	Plastic	4 Litre

## SULFURIC ACID 98%



H <sub>2</sub> SO <sub>4</sub>	FW. 98.08
CAS-No.	7664-93-9
UN No.	1830
EC No.	231-639-5
Class	8

Density 1 L =	1.84 Kg.
Melting Point	-20 C°
Boiling Point	330 C°
EC-Index-No	016-020-00-8
Packaging Group	II



GHS: H290, H314; P234, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P390, P405, P406

## Sulfuric Acid 98%, Pharma

Code BP1193

## Specifications

( Meet ACS, Ph.Eur, BP, USP )

Assay (by acidimetry)	97.5 - 98.5%	Ammonium (NH <sub>4</sub> )	2.0	ppm max.
Identification	Passes test	Chloride (Cl)	0.2	ppm max.
Appearance	Clear and Colorless	Nitrate (NO <sub>3</sub> )	0.5	ppm max.
Solubility	Passes test	Heavy metals (as Pb)	1.0	ppm max.
Color (APHA)	10 max.	Arsenic (As)	0.01	ppm max.
Residue after Ignition	0.0005% max.	Iron (Fe)	0.2	ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2.0 ppm max.	Mercury (Hg)	0.005	ppm max.

Cat No.	Package	Size
BP1193-G2.5L	Amber Glass	2.5 Litre
BP1193-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
BP1193-P30KG	Plastic	30 KG

## Sulfuric Acid 98%, AR

Code AR1193

### Specifications

Assay (by acidimetry)	97.5 - 98.5%	
Appearance	Passes test	
Color (APHA)	10	max.
Residue after Ignition	5.0	ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2.0	ppm max.
Ammonium (NH <sub>4</sub> )	1.0	ppm max.
Chloride (Cl)	0.1	ppm max.

### (Meet A.C.S. Specifications)

Nitrate (NO <sub>3</sub> )	0.5	ppm max.
Heavy metals (as Pb)	0.5	ppm max.
Arsenic and Antimony (as As)	0.01	ppm max.
Iron (Fe)	0.2	ppm max.
Mercury (Hg)	0.005	ppm max.
Nickel (Ni)	0.2	ppm max.

Cat No.	Package	Size
AR1193-G500ML	Amber Glass	500 ML
AR1193-G1L	Amber Glass	1 Litre
AR1193-G2.5L	Amber Glass	2.5 Litre
AR1193-P2.5L	Plastic	2.5 Litre
AR1193-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
AR1193-P4L	Plastic	4 Litre
AR1193-P20KG	Plastic	20 Litre
AR1193-P25KG	Plastic	25 Litre
AR1193-P30KG	Plastic	30 Litre

## Sulfuric Acid 98%, RCI Premium

Code RP1193

### Specifications

Assay (by acidimetry)	97.5 - 98.5%	
Appearance	Passes test	
Color (APHA)	10	max.
Residue after ignition	4	ppm max.
Ammonium (NH <sub>4</sub> )	1	ppm max.
Chloride (Cl)	0.1	ppm max.
Nitrate (NO <sub>3</sub> )	0.2	ppm max.
Phosphate (PO <sub>4</sub> )	0.5	ppm max.
Substance Reducing KMnO <sub>4</sub> (as SO <sub>2</sub> )	2	ppm max.
Heavy metal (as Pb)	0.5	ppm max.
Aluminium (Al)	0.1	ppm max.
Arsenic (As)	0.004	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.01	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.1	ppm max.

### (Meet A.C.S. Specifications)

Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Gold (Au)	0.1	ppm max.
Iron (Fe)	0.2	ppm max.
Lead (Pb)	0.01	ppm max.
Magnesium (Mg)	0.2	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.05	ppm max.
Mercury (Hg)	0.005	ppm max.
Nickel (Ni)	0.05	ppm max.
Potassium (K)	0.3	ppm max.
Selenium (Se)	1	ppm max.
Sodium (Na)	0.3	ppm max.
Strontium (Sr)	0.02	ppm max.
Tin (Sn)	0.2	ppm max.
Titanium (Ti)	0.2	ppm max.
Zinc (Zn)	0.2	ppm max.

Cat No.	Package	Size
RP1193-G500ML	Amber Glass	500 ML
RP1193-G1L	Amber Glass	1 Litre
RP1193-G2.5L	Amber Glass	2.5 Litre
RP1193-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
RP1193-G4L	Amber Glass	4 Litre
RP1193-P4L	Plastic	4 Litre
RP1193-P30KG	Plastic	30 KG





## Sulfuric Acid 98%, Semig

Code SM1193

## Specifications

Assay (by acidimetry)	97.5 - 98.5%
Color (APHA)	10 max.
Chloride (Cl)	0.1 ppm max.
Nitrate (NO <sub>3</sub> )	0.2 ppm max.
Phosphate (PO <sub>4</sub> )	0.5 ppm max.
Aluminium (Al)	0.2 ppm max.
Arsenic and Antimony (as As)	0.005 ppm max.
Boron (B)	0.02 ppm max.
Calcium (Ca)	0.3 ppm max.
Chromium (Cr)	0.2 ppm max.
Copper (Cu)	0.1 ppm max.

Gold (Au)	0.3 ppm max.
Iron (Fe)	0.2 ppm max.
Lead (Pb)	0.3 ppm max.
Magnesium (Mg)	0.3 ppm max.
Manganese (Mn)	0.2 ppm max.
Nickel (Ni)	0.1 ppm max.
Potassium (K)	0.3 ppm max.
Sodium (Na)	0.3 ppm max.
Tin (Sn)	0.2 ppm max.
Titanium (Ti)	0.3 ppm max.
Zinc (Zn)	0.2 ppm max.

Cat No.	Package	Size
SM1193-G500ML	Amber Glass	500 ML
SM1193-G1L	Amber Glass	1 Litre
SM1193-G2.5L	Amber Glass	2.5 Litre
SM1193-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
SM1193-G4L	Amber Glass	4 Litre
SM1193-P4L	Plastic	4 Litre
SM1193-P30KG	Plastic	30 KG

## Sulfuric Acid 98%, Electropure

Code EP1193

## Specifications

Assay (by acidimetry)	97.5 - 98.5%
Color (APHA)	10 max.
Residue after Ignition	3 ppm max.
Substances reducing permanganate (as SO <sub>2</sub> )	2 ppm max.
Ammonium (NH <sub>4</sub> )	2 ppm max.
Chloride (Cl)	0.1 ppm max.
Nitrate (NO <sub>3</sub> )	0.2 ppm max.
Phosphate (PO <sub>4</sub> )	0.5 ppm max.
Aluminium (Al)	0.05 ppm max.
Arsenic and Antimony (as As)	0.01 ppm max.
Barium (Ba)	0.05 ppm max.
Beryllium (Be)	0.02 ppm max.
Bismuth (Bi)	0.1 ppm max.
Boron (B)	0.05 ppm max.
Cadmium (Cd)	0.05 ppm max.
Calcium (Ca)	0.2 ppm max.
Chromium (Cr)	0.02 ppm max.
Cobalt (Co)	0.02 ppm max.
Copper (Cu)	0.01 ppm max.
Gallium (Ga)	0.02 ppm max.
Germanium (Ge)	0.1 ppm max.

Gold (Au)	0.1 ppm max.
Indium (In)	0.02 ppm max.
Iron (Fe)	0.1 ppm max.
Lead (Pb)	0.05 ppm max.
Lithium (Li)	0.02 ppm max.
Magnesium (Mg)	0.1 ppm max.
Manganese (Mn)	0.02 ppm max.
Molybdenum (Mo)	0.05 ppm max.
Nickel (Ni)	0.02 ppm max.
Platinum (Pt)	0.2 ppm max.
Potassium (K)	0.1 ppm max.
Silver (Ag)	0.02 ppm max.
Sodium (Na)	0.2 ppm max.
Strontium (Sr)	0.05 ppm max.
Thallium (Tl)	0.05 ppm max.
Tin (Sn)	0.1 ppm max.
Titanium (Ti)	0.1 ppm max.
Vanadium (V)	0.05 ppm max.
Zinc (Zn)	0.1 ppm max.
Zirconium (Zr)	0.1 ppm max.

Cat No.	Package	Size
EP1193-G500ML	Amber Glass	500 ML
EP1193-G1L	Amber Glass	1 Litre
EP1193-G2.5L	Amber Glass	2.5 Litre
EP1193-P2.5L	Plastic	2.5 Litre

Cat No.	Package	Size
EP1193-G4L	Amber Glass	4 Litre
EP1193-P4L	Plastic	4 Litre
EP1193-P30KG	Plastic	30 KG

## TETRACHLOROETHYLENE



C <sub>2</sub> Cl <sub>4</sub>	FW. 165.83	Density 1 L =	1.620 Kg.
CAS-No.	127-18-4	Melting Point	-22 C°
UN No.	1897	Boiling Point	121 C°
EC No.	204-825-9	EC-Index-No	602-028-00-4
Class:	6.1	Packaging Group:	III
GHS:	H315, H317, H319, H336, H351, H411; P201, P202, P261, P264, P273, P280, P281, P302 + P352, P304 + P340, P305 + P351 + P338, P308 + P313, P312, P332 + P313, P333 + P313, P337 + P313, P362 + P364, P391, P405		



### Tetrachloroethylene, AR Low Hydrocarbon

Code AR1199

#### Specifications

Assay (by GC.)	99.8%	min.	Residue on Evaporation	0.001%	max.
Water (by Coulometry)	0.01%	max.	Hydrocarbon	0.01%	max.
Acidity (mEq./g.)	0.0005	max.			

Cat No.	Package	Size	Cat No.	Package	Size
AR1199-G500ML	Amber Glass	500 ML	AR1199-G4L	Amber Glass	4 Litre
AR1199-G1L	Amber Glass	1 Litre	AR1199-M20L	Metal	20 Litre
AR1199-G2.5L	Amber Glass	2.5 Litre	AR1199-M200L	Metal	200 Litre

### Tetrachloroethylene, AR

Code AR1198

#### Specifications

Assay (by GC.)	99.8%	min.	Acidity (mEq./g.)	0.0005	max.
Water (by Coulometry)	0.01%	max.	Residue on Evaporation	0.001%	max.

Cat No.	Package	Size	Cat No.	Package	Size
AR1198-G500ML	Amber Glass	500 ML	AR1198-G4L	Amber Glass	4 Litre
AR1198-G1L	Amber Glass	1 Litre	AR1198-P20L	Metal	20 Litre
AR1198-G2.5L	Amber Glass	2.5 Litre	AR1198-P200L	Metal	200 Litre

### Tetrachloroethylene, RCI Premium Low Hydrocarbon

Code RP1199

#### Specifications

Assay (by GC.)	99.8%	min.	Chromium (Cr)	0.01	ppm max.
Identity (IR)	Passes test		Cobalt (Co)	0.01	ppm max.
Water (by Coulometry)	0.01%	max.	Copper (Cu)	0.01	ppm max.
Acidity (mEq./g.)	0.0005	max.	Iron (Fe)	0.05	ppm max.
Residue on Evaporation	0.001%	max.	Lead (Pb)	0.05	ppm max.
Hydrocarbon	0.01%	max.	Magnesium (Mg)	0.05	ppm max.
Aluminium (Al)	0.2	ppm max.	Manganese (Mn)	0.01	ppm max.
Barium (Ba)	0.05	ppm max.	Nickel (Ni)	0.01	ppm max.
Boron (B)	0.01	ppm max.	Tin (Sn)	0.05	ppm max.
Cadmium (Cd)	0.02	ppm max.	Zinc (Zn)	0.05	ppm max.
Calcium (Ca)	0.2	ppm max.			

Cat No.	Package	Size	Cat No.	Package	Size
RP1199-G500ML	Amber Glass	500 ML	RP1199-G2.5L	Amber Glass	2.5 Litre
RP1199-G1L	Amber Glass	1 Litre	RP1199-G4L	Amber Glass	4 Litre

## Tetrachloroethylene, RCI Premium

Code RP1198

### Specifications

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.001%	max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.

Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1198-G500ML	Amber Glass	500 ML
RP1198-G1L	Amber Glass	1 Litre
RP1198-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1198-G4L	Amber Glass	4 Litre
RP1198-M25L	Metal	25 Litre
RP1198-M200L	Metal	200 Litre

## Tetrachloroethylene, UV-IR

Code IR1198

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
400 nm	95%	min.

350 nm	89%	min.
310 nm	85%	min.
295 nm	60%	min.
290 nm	15%	min.
Fluorescence (as quinine)		
at 365 nm	2	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1198-G500ML	Amber Glass	500 ML
IR1198-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1198-G2.5L	Amber Glass	2.5 Litre
IR1198-G4L	Amber Glass	4 Litre



## TETRAHYDROFURAN



C <sub>4</sub> H <sub>8</sub> O	FW. 72.11	Density 1 L =	0.890 Kg.
CAS-No.	109-99-9	Melting Point	-108.5 C°
UN No.	2056	Boiling Point	65-66 C°
EC No.	203-726-8	EC-Index-No	603-025-00-0
Class:	3	Packaging Group:	II



GHS: H225, H302, H319, H335, H351, EUH019; P201, P202, P210, P233, P240, P241, P242, P243, P261, P264, P270, P271, P280, P281, P301+P310, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P308 + P313, P312, P337 + P313, P330, P370 + P378, P403 + P235, P405

### Tetrahydrofuran, AR

Code AR1203B

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.8%	min.
Color (APHA)	20	max.
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.03%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.015%	max.

Stabilized with about 250 ppm BHT.

Cat No.	Package	Size
AR1203B-G500ML	Amber Glass	500 ML
AR1203B-G1L	Amber Glass	1 Litre
AR1203B-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1203B-G4L	Amber Glass	4 Litre
AR1203B-M25L	Metal	25 Litre
AR1203B-M200L	Metal	200 Litre

### Tetrahydrofuran, RCI Premium

Code RP1203B

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.03%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.005%	max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.

Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Stabilized with about 250 ppm BHT.

Cat No.	Package	Size
RP1203B-G500ML	Amber Glass	500 ML
RP1203B-G1L	Amber Glass	1 Litre
RP1203B-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1203B-G4L	Amber Glass	4 Litre
RP1203B-M25L	Metal	25 Litre
RP1203B-M200L	Metal	200 Litre

## Tetrahydrofuran, UV-IR

Code IR1200

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
UV Transmission Levels (%T)		
300 nm	98%	min.

280 nm	95%	min.
260 nm	75%	min.
250 nm	60%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1200-G500ML	Amber Glass	500 ML
IR1200-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1200-G2.5L	Amber Glass	2.5 Litre
IR1200-G4L	Amber Glass	4 Litre

## Tetrahydrofuran, Anhydrous (50 ppm)

Code AH1202

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.005%	max.

Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.005%	max.

Cat No.	Package	Size
AH1202-G500ML	Amber Glass	500 ML
AH1202-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1202-G2.5L	Amber Glass	2.5 Litre
AH1202-G4L	Amber Glass	4 Litre

## Tetrahydrofuran, Anhydrous (50 ppm)

Code AH1204B

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.005%	max.
Acidity (mEq./g.)	0.0005	max.

Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.001%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.005%	max.

Stabilized with about 250 ppm BHT.

Cat No.	Package	Size
AH1204B-G500ML	Amber Glass	500 ML
AH1204B-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1204B-G2.5L	Amber Glass	2.5 Litre
AH1204B-G4L	Amber Glass	4 Litre

## Tetrahydrofuran, Anhydrous (20 ppm)

Code AH1201B

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.002%	max.
Acidity (mEq./g.)	0.0005	max.

Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.001%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.005%	max.

Stabilized with about 250 ppm BHT.

Cat No.	Package	Size
AH1201B-G500ML	Amber Glass	500 ML
AH1201B-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1201B-G2.5L	Amber Glass	2.5 Litre
AH1201B-G4L	Amber Glass	4 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Tetrahydrofuran, HPLC

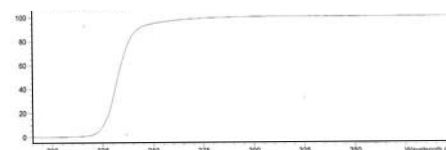
Code LC1200

### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.01%	max.
UV Transmission Levels (%T)		
280 nm	99%	min.
270 nm	98%	min.
260 nm	90%	min.
250 nm	80%	min.
240 nm	70%	min.

Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1200-G500ML	Amber Glass	500 ML
LC1200-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1200-G2.5L	Amber Glass	2.5 Litre
LC1200-G4L	Amber Glass	4 Litre

## Tetrahydrofuran, HPLC

Code LC1203B

### Specifications

Assay (by GC.)	99.9%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.

Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.001%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.01%	max.

Stabilized with about 250 ppm BHT.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
LC1203B-G4L	Amber Glass	4 Litre

## Tetrahydrofuran, Peptide Synthesis

Code PS1203B

### Specifications

Assay (by GC.)	99.9%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.

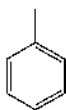
Residue on Evaporation	0.0001%	max.
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	0.0005%	max.
Free Amines	0.001%	max.

Stabilized with about 250 ppm BHT.

Cat No.	Package	Size
PS1203B-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PS1203B-G2.5L	Amber Glass	2.5 Litre

## TOLUENE



C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	FW. 92.14	Density 1 L =	0.870 Kg.
CAS-No.	108-88-3	Melting Point	-95 C°
UN No.	1294	Boiling Point	110.6 C°
EC No.	203-625-9	EC-Index-No	601-021-00-3
Class:	3	Packaging Group:	II
GHS:	H225, H304, H315, H336, H361d, H373; P201, P202, P210, P233, P240, P241, P242, P243, P260, P264, P271, P280, P301 + P310, P302 + P352, P303 + P361 + P353, P304 + P340, P308 + P313, P314, P331, P332 + P313, 362 + P364, P370 + P378, P403 + P235, P405		



### Toluene, AR

Code AR1207

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0005	max.

Residue on Evaporation	0.001%	max.
Substances darkened by sulfuric acid	Passes test	
Sulfur Compounds (S)	0.0003%	max.

Cat No.	Package	Size
AR1207-G500ML	Amber Glass	500 ML
AR1207-G1L	Amber Glass	1 Litre
AR1207-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1207-G4L	Amber Glass	4 Litre
AR1207-M20L	Metal	20 Litre

### Toluene, RCI Premium

Code RP1347

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0004	max.
Residue on Evaporation	0.0005%	max.
Sulfur Compounds (S)	0.003%	max.
Benzene (GC.)	0.02%	max.
Thiophene	0.0001%	max.
Substances darkened by sulfuric acid	Passes test	
Chloride (Cl)	0.5	ppm max.
Sulfate (SO <sub>4</sub> )	1	ppm max.
Aluminium (Al)	0.2	ppm max.
Arsenic (As)	0.02	ppm max.
Antimony (Sb)	0.02	ppm max.
Barium (Ba)	0.05	ppm max.
Beryllium (Be)	0.02	ppm max.
Bismuth (Bi)	0.1	ppm max.
Boron (B)	0.02	ppm max.
Cadmium (Cd)	0.05	ppm max.

Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.02	ppm max.
Cobalt (Co)	0.02	ppm max.
Copper (Cu)	0.02	ppm max.
Gallium (Ga)	0.02	ppm max.
Gold (Au)	0.05	ppm max.
Indium (In)	0.02	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Lithium (Li)	0.02	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.02	ppm max.
Molybdenum (Mo)	0.05	ppm max.
Nickel (Ni)	0.02	ppm max.
Platinum (Pt)	0.02	ppm max.
Silver (Ag)	0.02	ppm max.
Thallium (Tl)	0.05	ppm max.
Tin (Sn)	0.1	ppm max.
Titanium (Ti)	0.05	ppm max.
Vanadium (V)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.
Zirconium (Zr)	0.02	ppm max.

Cat No.	Package	Size
RP1347-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1347-M200L	Metal	200 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**Toluene, UV-IR** Code IR1347

**Specifications**

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0004	max.
Residue on Evaporation	0.0005%	max.
Substances darkened by sulfuric acid	Passes test	

UV Transmission Levels (%T)		
350 nm	98%	min.
340 nm	96%	min.
330 nm	95%	min.
320 nm	90%	min.
Fluorescence (as quinine)		
at 365 nm	2	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1347-G500ML	Amber Glass	500 ML
IR1347-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1347-G2.5L	Amber Glass	2.5 Litre
IR1347-G4L	Amber Glass	4 Litre

**Toluene, Anhydrous (50 ppm)** Code AH1348

**Specifications**

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.005%	max.

Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0004	max.
Residue on Evaporation	0.0005%	max.
Substances darkened by sulfuric acid	Passes test	

Cat No.	Package	Size
AH1348-G500ML	Amber Glass	500 ML
AH1348-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
AH1348-G2.5L	Amber Glass	2.5 Litre
AH1348-G4L	Amber Glass	4 Litre

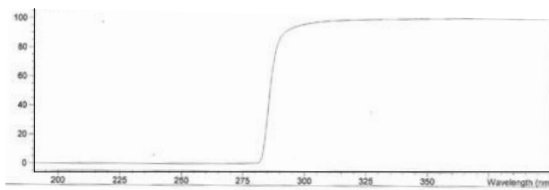
**Toluene, HPLC** Code LC1347

**Specifications**

Assay (by GC.)	99.8%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0004	max.
Residue on Evaporation	0.0005%	max.
Sulfur Compounds (S)	0.003%	max.
Substances darkened by sulfuric acid	Passes test	
UV Transmission Levels (%T)		
350 nm	99%	min.
330 nm	98%	min.
310 nm	90%	min.
300 nm	80%	min.

290 nm	50%	min.
Fluorescence (as quinine)		
at 365 nm	2	ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1347-G500ML	Amber Glass	500 ML
LC1347-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1347-G2.5L	Amber Glass	2.5 Litre
LC1347-G4L	Amber Glass	4 Litre

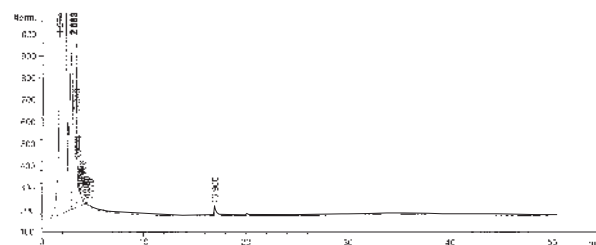


## Toluene, Pesticide

Code PC1347

### Specifications

Assay (by GC.)	99.8%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0002	max.
Alkalinity (mEq./g.)	0.0004	max.
Sulfur Compounds (S)	0.003%	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
ECD (as lindane standard) Single impurity peak	10	ng/L



Cat No.	Package	Size
PC1347-G500ML	Amber Glass	500 ML
PC1347-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1347-G2.5L	Amber Glass	2.5 Litre
PC1347-G4L	Amber Glass	4 Litre

## Toluene, Semig

Code SM1207

### Specifications

Assay (by GC.)	99.8%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.
Acidity (Eq./g.)	0.2	max.
Residue on Evaporation	5	ppm max.
Substances darkened by sulfuric acid	Passes Test	
Sulfur Compounds (as S)	0.003%	max.
Chloride (Cl)	3	ppm max.
Phosphate (PO <sub>4</sub> )	1	ppm max.
Heavy metals (as Pb)	1	ppm max.
Aluminium (Al)	1	ppm max.
Arsenic and Antimony (as As)	0.01	ppm max.
Barium (Ba)	1	ppm max.
Boron (B)	0.2	ppm max.
Cadmium (Cd)	1	ppm max.
Calcium (Ca)	1	ppm max.
Chromium (Cr)	0.5	ppm max.

Cobalt (Co)	0.1	ppm max.
Copper (Cu)	0.1	ppm max.
Gallium (Ga)	0.5	ppm max.
Germanium (Ge)	1	ppm max.
Gold (Au)	0.5	ppm max.
Iron (Fe)	0.1	ppm max.
Lithium (Li)	1	ppm max.
Magnesium (Mg)	1	ppm max.
Manganese (Mn)	1	ppm max.
Nickel (Ni)	0.1	ppm max.
Potassium (K)	1	ppm max.
Silicon (Si)	1	ppm max.
Silver (Ag)	0.5	ppm max.
Sodium (Na)	1	ppm max.
Strontium (Sr)	1	ppm max.
Tin (Sn)	1	ppm max.
Zinc (Zn)	1	ppm max.

Cat No.	Package	Size
SM1207-G500ML	Amber Glass	500 ML
SM1207-G1L	Amber Glass	1 Litre
SM1207-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
SM1207-G4L	Amber Glass	4 Litre
SM1207-M20L	Metal	20 Litre

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

**Toluene, LV-GC** Code LV1347

**Specifications**

Assay (by GC.)	99.8%	min.	Residue on Evaporation	0.0003%	max.
Identity (IR)	Passes test		Substances darkened by sulfuric acid	Passes test	
Appearance	Clear		Sulfur Compounds (S)	0.003%	max.
Color (APHA)	10	max.	ECD (as lindane standard)	10	pg/ml max.
Water (by Coulometry)	0.02%	max.	Single impurity peak		
Acidity (mEq./g.)	0.0002	max.	Any hydrocarbon between C10 to C40	0.1	mg/L max.
Alkalinity (mEq./g.)	0.0004	max.			

Cat No.	Package	Size	Cat No.	Package	Size
LV1347-G1L	Amber Glass	1 Litre	LV1347-G2.5L	Amber Glass	2.5 Litre

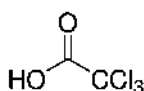
**Toluene, Peptide Synthesis** Code PS1347

**Specifications**

Assay (by GC.)	99.8%	min.	Alkalinity (mEq./g.)	0.0004	max.
Identity (IR)	Passes test		Residue on Evaporation	0.0005%	max.
Color (APHA)	10	max.	Substances darkened by sulfuric acid	Passes test	
Water (by Coulometry)	0.01%	max.	Free Amines	0.001%	max.
Acidity (mEq./g.)	0.0002	max.			

Cat No.	Package	Size	Cat No.	Package	Size
PS1347-G1L	Amber Glass	1 Litre	PS1347-G2.5L	Amber Glass	2.5 Litre

**TRICHLOROACETIC ACID**



CCl <sub>3</sub> COOH	FW. 163.38	Density =	1.63 g/cm <sup>3</sup>
CAS-No.	76-03-9	Melting Point	197 C°
UN No.	1839	Boiling Point	54-56 C°
EC No.	200-927-2	EC-Index-No	607-004-00-7
Class:	8	Packaging Group:	II



GHS: H314, H410; P260, P264, P273, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P391, P405

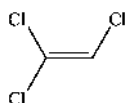
**Trichloroacetic acid, AR** Code AR1317

**Specifications**

Assay	99.5%	min.	Copper (Cu)	2	ppm max.
Substances reducing KMnO <sub>4</sub>	0.0002%	max.	Iron (Fe)	5	ppm max.
Chloride (Cl)	0.001%	max.	Lead (Pb)	2	ppm max.
Total nitrogen (N)	50	ppm max.	Magnesium (Mg)	10	ppm max.
Total phosphorus (P)	10	ppm max.	Potassium (K)	10	ppm max.
Total silicon (Si)	20	ppm max.	Sodium (Na)	20	ppm max.
Total sulfur (S)	200	ppm max.	Zinc (Zn)	5	ppm max.
Calcium (Ca)	10	ppm max.			

Cat No.	Package	Size
AR1317-G500G	Amber Glass	500 G

## TRICHLOROETHYLENE



Cl <sub>2</sub> CCHCl	FW. 131.79	Density 1 L =	1.460 Kg.
CAS-No.	79-01-6	Melting Point	-86 C°
UN No.	1710	Boiling Point	87 C°
EC No.	201-167-4	EC-Index-No	602-027-00-9
Class:	6.1	Packaging Group:	III
GHS:	H315, H319, H336, H341, H350, H412; P201, P202, P261, P264, P271, P273, P280, P302 + P352, P304 + P340, P305 + P351 + P338, P308 + P313, P312, P332 + P313, P337 + P313, P362, P403 + P233, P405		



### Trichloroethylene, AR

Code AR1205

#### Specifications

Assay (by GC.)	99.5%	min.	Acidity (mEq./g.)	0.0005	max.
Water (by Coulometry)	0.03%	max.	Residue on Evaporation	0.001%	max.

Cat No.	Package	Size
AR1205-G500ML	Amber Glass	500 ML
AR1205-G1L	Amber Glass	1 Litre
AR1205-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1205-G4L	Amber Glass	4 Litre
AR1205-M20L	Metal	20 Litre
AR1205-M200L	Metal	200 Litre

### Trichloroethylene, RCI Premium

Code RP1205

#### Specifications

Assay (by GC.)	99.5%	min.	Cadmium (Cd)	0.02	ppm max.
Identity (IR)	Passes test		Calcium (Ca)	0.2	ppm max.
Color (APHA)	10	max.	Chromium (Cr)	0.01	ppm max.
Water (by Coulometry)	0.01%	max.	Cobalt (Co)	0.01	ppm max.
Acidity (mEq./g.)	0.0001	max.	Copper (Cu)	0.01	ppm max.
Alkalinity (mEq./g.)	0.0003	max.	Iron (Fe)	0.05	ppm max.
Residue on Evaporation	0.001%	max.	Lead (Pb)	0.05	ppm max.
Free chlorine (Cl)	0.00003%	max.	Magnesium (Mg)	0.05	ppm max.
Heavy metals (as Pb)	0.0001%	max.	Manganese (Mn)	0.01	ppm max.
Aluminium (Al)	0.2	ppm max.	Nickel (Ni)	0.01	ppm max.
Barium (Ba)	0.05	ppm max.	Tin (Sn)	0.05	ppm max.
Boron (B)	0.01	ppm max.	Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1205-G500ML	Amber Glass	500 ML
RP1205-G1L	Amber Glass	1 Litre
RP1205-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1205-G4L	Amber Glass	4 Litre
RP1205-M25L	Metal	25 Litre
RP1205-M200L	Metal	200 Litre



## Trichloroethylene, HPLC

Code LC1205

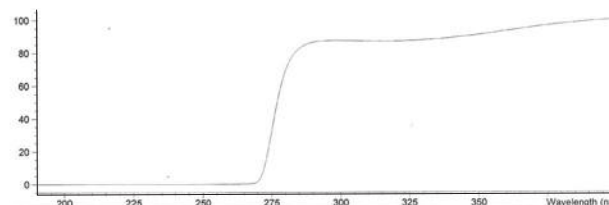
### Specifications

Assay (by GC.)	99.8%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
400 nm	98%	min.
350 nm	85%	min.
320 nm	80%	min.
300 nm	70%	min.
280 nm	50%	min.

### Fluorescence (as quinine)

at 365 nm 1 ppb max.

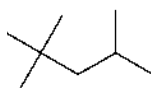
Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1205-G500ML	Amber Glass	500 ML
LC1205-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LC1205-G2.5L	Amber Glass	2.5 Litre
LC1205-G4L	Amber Glass	4 Litre

## 2,2,4-TRIMETHYLPENTANE



(CH<sub>3</sub>)<sub>2</sub>CHCH<sub>2</sub>C(CH<sub>3</sub>)<sub>3</sub> FW. 114.23  
CAS-No. 540-84-1

EC No. 208-759-1  
Class: 3

GHS: H225, H304, H315, H336, H410; P210, P233, P240, P241, P242, P243, P261, P264, P271, P273, P280, P301 + P310, P302 + P352, P303 + P361 + P353, P304 + P340, P312, P331, P332 + P313, P362, P391, P370 + P378, P403 + P235, P405

Density 1 L = 0.690 Kg.  
Melting Point -107 °C  
Boiling Point 99 °C  
EC-Index-No 601-009-00-8  
Packaging Group: II



## 2,2,4-Trimethylpentane, AR

Code AR1206

### Specifications

Assay (by GC.)	99.5%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.

### (Meet A.C.S. Specifications)

Acidity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.001%	max.
Sulfur Compounds (S)	0.001%	max.

Cat No.	Package	Size
AR1206-G500ML	Amber Glass	500 ML
AR1206-G1L	Amber Glass	1 Litre
AR1206-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1206-G4L	Amber Glass	4 Litre
AR1206-M25L	Metal	25 Litre
AR1206-M200L	Metal	200 Litre



## 2,2,4-Trimethylpentane, RCI Premium

Code RP1206

### Specifications

(Meet A.C.S. Specifications)

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.0006%	max.
Readily carbonizable substances	Passes test	
Sulfur Compounds (S)	0.001%	max.
Aluminium (Al)	0.2	ppm max.
Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.

Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1206-G500ML	Amber Glass	500 ML
RP1206-G1L	Amber Glass	1 Litre
RP1206-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1206-G4L	Amber Glass	4 Litre
RP1206-M25L	Metal	25 Litre
RP1206-M200L	Metal	200 Litre

## 2,2,4-Trimethylpentane, UV-IR

Code IR1206

### Specifications

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0005%	max.
UV Transmission Levels (%T)		
250 nm	98%	min.

240 nm	95%	min.
230 nm	90%	min.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
IR1206-G500ML	Amber Glass	500 ML
IR1206-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
IR1206-G2.5L	Amber Glass	2.5 Litre
IR1206-G4L	Amber Glass	4 Litre



## 2,2,4-Trimethylpentane, HPLC

Code LC1206

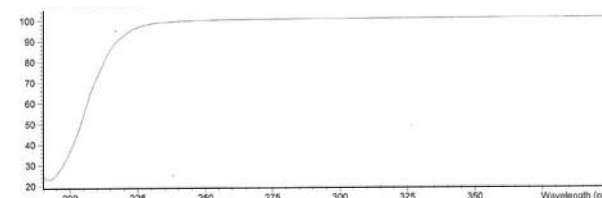
### Specifications

Assay (by GC.)	99.5%	min.
Appearance	Clear and colorless liquid	
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.01%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0002	max.
Residue on Evaporation	0.0005%	max.
Sulfur Compounds (S)	0.005%	max.
UV Transmission Levels (%T)		
250 nm	99%	min.
240 nm	98%	min.
230 nm	95%	min.
220 nm	80%	min.
210 nm	50%	min.

### Fluorescence (as quinine)

at 365 nm 1 ppb max.

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
LC1206-G500ML	Amber Glass	500 ML
LC1206-G1L	Amber Glass	1 Litre

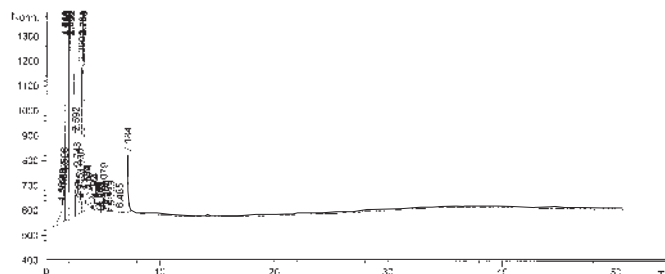
Cat No.	Package	Size
LC1206-G2.5L	Amber Glass	2.5 Litre
LC1206-G4L	Amber Glass	4 Litre

## 2,2,4-Trimethylpentane, Pesticide

Code PC1206

### Specifications

Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.
Substances darkened by sulfuric acid	Passes test	
Sulfur Compounds (as S)	0.001%	max.
ECD (as lindane standard) Single impurity peak	10	ng/L



Cat No.	Package	Size
PC1206-G500ML	Amber Glass	500 ML
PC1206-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1206-G2.5L	Amber Glass	2.5 Litre
PC1206-G4L	Amber Glass	4 Litre

## 2,2,4-Trimethylpentane, LV-GC

Code LV1206

### Specifications

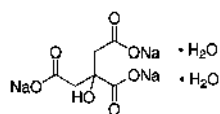
Assay (by GC.)	99.5%	min.
Identity (IR)	Passes test	
Color (APHA)	10	max.
Water (by Coulometry)	0.02%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.0003%	max.

Substances darkened by sulfuric acid	Passes test	
Sulfur Compounds (as S)	0.001%	max.
ECD (as lindane standard)	10	pg/ml max.
Single impurity peak		
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1206-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1206-G2.5L	Amber Glass	2.5 Litre

## tri-SODIUM CITRATE DIHYDRATE



$C_6H_5Na_3O_7 \cdot 2H_2O$       FW. 294.10  
 CAS-No.      6132-04-3  
 EC No.      200-675-3

Density 1 L =      1.76 Kg.  
 Melting Point      150 °C

### tri-Sodium Citrate Dihydrate, AR

Code AR1209

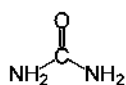
#### Specifications

Description	White crystalline powder	Phosphate (PO <sub>4</sub> )	0.002%	max
Assay	99.0% min	Sulfate (SO <sub>4</sub> )	0.004%	max
pH (5% in Water)	7.5 - 9.0	Heavy metals (as Pb)	0.0005%	max
Total nitrogen (N)	0.001% max	Iron (Fe)	0.0005%	max
Chloride (Cl)	0.001% max			

Cat No.	Package	Size
AR1209-P500G	Plastic	500 G
AR1209-P1KG	Plastic	1 KG

Cat No.	Package	Size
AR1209-P5KG	Plastic	5 KG
AR1209-P25KG	Plastic	25 KG

## UREA



$NH_2CONH_2$       FW. 60.06  
 CAS-No.      57-13-6  
 EC No.      200-315-5

Density =      1.34 Kg.  
 Melting Point      133 °C

### Urea, AR

Code AR1250

#### Specifications

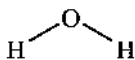
Assay	99.0% min.	Sulfate (SO <sub>4</sub> )	0.001%	max.
Insoluble matter	0.01% max.	Copper (Cu)	0.005%	max.
Residue after ignition	0.01% max.	Iron (Fe)	0.001%	max.
Biuret (C <sub>2</sub> H <sub>5</sub> N <sub>3</sub> O <sub>2</sub> )	0.2% max.	Heavy metal (as Pb)	0.001%	max.
Chloride (Cl)	0.0005% max.			

Cat No.	Package	Size
AR1250-P500G	Plastic	500 G
AR1250-P5KG	Plastic	5 KG

Cat No.	Package	Size
AR1250-P25KG	Plastic	25 KG



## WATER



H<sub>2</sub>O  
CAS-No. 7732-18-5

Density 1 L = 1.000 Kg.  
Melting Point 0 °C  
Boiling Point 100 °C

### Water (Deionized Water)

Code GN1056

#### Specifications

Appearance	Clear, colorless solution
pH	5.0 - 7.0
Calcium (Ca)	No turbidity is produced.
Chloride (Cl)	No opalescence is produced.

Sulfate (SO <sub>4</sub> )	No turbidity is produced.
Oxidizable Substance	The pink color does not completely disappear
Total Solid	Not more than 0.001 g/100 mL.

Cat No.	Package	Size
GN1056-P4L	Plastic	4 Litre

Cat No.	Package	Size
GN1056-P20L	Plastic	20 Litre

### Water, AR

Code AR1210

#### Specifications

Residue on Evaporation	0.0005%	max.
Substances reducing permanganate	0.1	ppm max.
Chloride (Cl)	0.1	ppm max.
Nitrate (NO <sub>3</sub> )	0.3	ppm max.
Phosphate (PO <sub>4</sub> )	0.1	ppm max.
Silicate (SiO <sub>2</sub> )	0.2	ppm max.
Sulfate (SO <sub>4</sub> )	0.5	ppm max.
Cadmium (Cd)	0.01	ppm max.
Calcium (Ca)	0.05	ppm max.

Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.1	ppm max.
Iron (Fe)	0.01	ppm max.
Lead (Pb)	0.005	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Potassium (K)	0.1	ppm max.
Zinc (Zn)	0.01	ppm max.

Cat No.	Package	Size
AR1210-G2.5L	Amber Glass	2.5 Litre
AR1210-P2.5L	Plastic	2.5 Litre
AR1210-G4L	Amber Glass	4 Litre

Cat No.	Package	Size
AR1210-P20L	Plastic	20 Litre
AR1210-P200L	Plastic	200 Litre

### Water, HPLC

Code LC1210

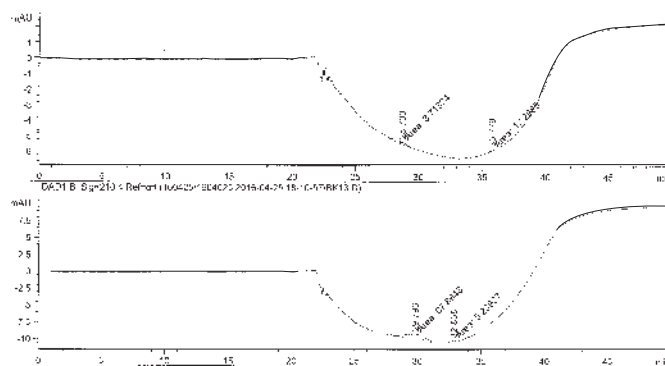
#### Specifications

Appearance	Clear and colorless liquid
Residue on Evaporation	0.0005% max.
Conductivity (µS/cm)	1 max.
Gradient Specification 254 nm	
Largest peak	1 mAU max.
Fluorescence (as quinine)	
at 254 nm	1 ppb max.
at 365 nm	0.5 ppb max.

Determined by a 40 ml sample enrichment of C18 column followed by a gradient from 100% water to 100% acetonitrile at a rate of 5% per minute and a flow rate of 1 ml/ min.

Product passed through 0.2 micron final filter.

Cat No.	Package	Size
LC1210-G500ML	Amber Glass	500 ML
LC1210-G1L	Amber Glass	1 Litre
LC1210-G2.5L	Amber Glass	2.5 Litre



Cat No.	Package	Size
LC1210-P2.5L	Plastic	2.5 Litre
LC1210-G4L	Amber Glass	4 Litre
LC1210-P4L	Plastic	4 Litre



## Water, LC-MS

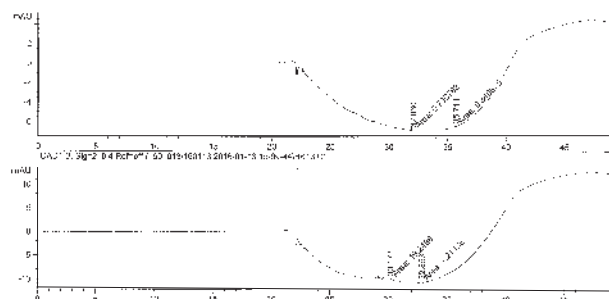
Code LM1210

### Specifications

Residue on Evaporation	0.0001%	max.
Chloride (Cl)	10	ppb max.
Fluoride (F)	10	ppb max.
Nitrate (NO <sub>3</sub> )	100	ppb max.
Sulfate (SO <sub>4</sub> )	100	ppb max.
UV Transmission Levels (%T)		
230 nm	99%	min.
200 nm	95%	min.
Gradient Specification		
at 210 nm	2.0	mAU max.
at 254 nm	1.0	mAU max.
Fluorescence (as quinine)		
at 254 nm	1	ppb max.
at 365 nm	1	ppb max.
Aluminium (Al)	5	ppb max.
Barium (Ba)	5	ppb max.
Cadmium (Cd)	5	ppb max.
Calcium (Ca)	10	ppb max.
Chromium (Cr)	5	ppb max.
Cobalt (Co)	5	ppb max.
Copper (Cu)	5	ppb max.

Iron (Fe)	10	ppb max.
Lead (Pb)	5	ppb max.
Magnesium (Mg)	5	ppb max.
Manganese (Mn)	5	ppb max.
Nickel (Ni)	5	ppb max.
Potassium (K)	5	ppb max.
Sodium (Na)	20	ppb max.
Tin (Sn)	5	ppb max.
Zinc (Zn)	5	ppb max.

Product passed through 0.1 micron final filter.



Cat No.	Package	Size
LM1210-G500ML	Amber Glass	500 ML
LM1210-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LM1210-G2.5L	Amber Glass	2.5 Litre
LM1210-G4L	Amber Glass	4 Litre

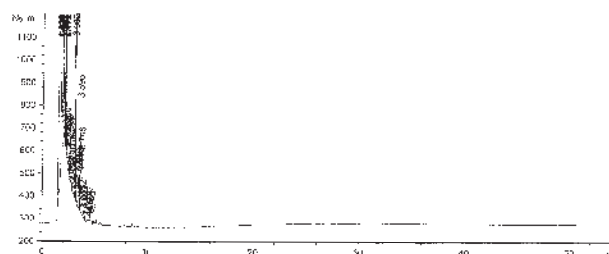
## Water, Pesticide

Code PC1210

### Specifications

Residue on Evaporation	0.0003%	max.
Conductivity (µS/cm)	1	max.
ECD (as lindane standard) Single impurity peak	10	ng/L

Product passed through 0.2 micron final filter.



Cat No.	Package	Size
PC1210-G500ML	Amber Glass	500 ML
PC1210-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
PC1210-G2.5L	Amber Glass	2.5 Litre
PC1210-G4L	Amber Glass	4 Litre

## Water, LV-GC

Code LV1210

### Specifications

Residue on Evaporation	0.0003%	max.
Conductivity (µS/cm)	1	max.

ECD (as lindane standard) Single impurity peak	10	pg/ml max.
Any hydrocarbon between C10 to C40	0.1	mg/L max.

Cat No.	Package	Size
LV1210-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
LV1210-G2.5L	Amber Glass	2.5 Litre

## WIJS SOLUTION

	FW. 60.05	Density 1 L =	1.06 Kg.
CAS-No.	64-19-7		
UN No.	2920		
EC No.	200-580-7	EC-Index-No	607-002-00-6
Class:	8 (3)	Packaging Group:	II
GHS	H226, H290, H314; P210, P233, P240, P241, P242, P243, P260, P264, P280, P301 + P330 + P331, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P310, P363, P370 + P378, P390, P406, P403 + P235, P405		



### Wijs Solution Code GN1211

#### Specifications

Application test	Passes test	According to PORIM* test methods.
*PORIM: Palm Oil Research Institute of Malaysia.		

Cat No.	Package	Size
GN1211-G500ML	Amber Glass	500 ML
GN1211-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
GN1211-G2.5L	Amber Glass	2.5 Litre
GN1211-G4L	Amber Glass	4 Litre

### Wijs Solution 0.1N Code GN1212

#### Specifications

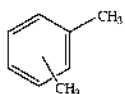
Application test	Passes test	According to PORIM* test methods.
*PORIM: Palm Oil Research Institute of Malaysia.		

Cat No.	Package	Size
GN1212-G500ML	Amber Glass	500 ML
GN1212-G1L	Amber Glass	1 Litre

Cat No.	Package	Size
GN1212-G2.5L	Amber Glass	2.5 Litre
GN1212-G4L	Amber Glass	4 Litre



## XYLENE



UN No. 1307  
 EC No. 215-535-7  
 Class: 3

EC-Index-No 601-022-00-9  
 Packaging Group: III



GHS: H226, H304, H312 + H332, H315, H319, H335, H373; P210, P233, P240, P241, P242, P243, P260, P264, P271, P280, P301+P310, P302 + P352, P303 + P361 + P353, P304, P304 + P340, P312, P332 + P313, P331, P337 + P313, P362 + P364, P370 + P378, P403 + P235, P405

### Xylene, AR

Code AR1213

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC. – Total of C <sub>8</sub> H <sub>10</sub> isomers)	98.5%	min.
Color (APHA)	10	max.
Water (by Coulometry)	0.05%	max.
Acidity (mEq./g.)	0.0005	max.
Residue on Evaporation	0.002%	max.

Benzene (GC.)	0.1%	max.
Toluene (GC.)	0.5%	max.
Substances darkened by sulfuric acid	Passes test	
Sulfur Compounds (S)	0.001%	max.

Cat No.	Package	Size
AR1213-G500ML	Amber Glass	500 ML
AR1213-G1L	Amber Glass	1 Litre
AR1213-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
AR1213-G4L	Amber Glass	4 Litre
AR1213-M20L	Metal	20 Litre

### Xylene, RCI Premium

Code RP1354

#### Specifications

(Meet A.C.S. Specifications)

Assay (by GC. : Total of C <sub>8</sub> H <sub>10</sub> isomers)	98.5%	min.
Identity (IR)	Passes test	
Appearance	Clear	
Color (APHA)	10	max.
Water (by Coulometry)	0.03%	max.
Acidity (mEq./g.)	0.0005	max.
Alkalinity (mEq./g.)	0.0003	max.
Residue on Evaporation	0.001%	max.
Benzene (GC.)	0.1%	max.
Ethylbenzene (GC.)	25%	max.
Toluene (GC.)	0.2%	max.
Substances darkened by sulfuric acid	Passes test	
Sulfur Compounds (S)	0.002%	max.
Thiophene	Passes test	
Aluminium (Al)	0.2	ppm max.

Barium (Ba)	0.05	ppm max.
Boron (B)	0.01	ppm max.
Cadmium (Cd)	0.02	ppm max.
Calcium (Ca)	0.2	ppm max.
Chromium (Cr)	0.01	ppm max.
Cobalt (Co)	0.01	ppm max.
Copper (Cu)	0.01	ppm max.
Iron (Fe)	0.05	ppm max.
Lead (Pb)	0.05	ppm max.
Magnesium (Mg)	0.05	ppm max.
Manganese (Mn)	0.01	ppm max.
Nickel (Ni)	0.01	ppm max.
Tin (Sn)	0.05	ppm max.
Zinc (Zn)	0.05	ppm max.

Cat No.	Package	Size
RP1354-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
RP1354-M200L	Metal	200 Litre



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

## Xylene, Semig

Code SM1213

### Specifications


Assay (by GC.)	99.0%	min.
Water (by Coulometry)	0.02%	max.
Acidity Eq./g.)	0.3	max.
Residue on Evaporation	5	ppm max.
Chloride (Cl)	3	ppm max.
Phosphate (PO <sub>4</sub> )	1	ppm max.
Aluminium (Al)	0.1	ppm max.
Arsenic and Antimony (as As)	0.01	ppm max.
Boron (B)	0.1	ppm max.
Calcium (Ca)	0.1	ppm max.
Chromium (Cr)	0.1	ppm max.

Copper (Cu)	0.1	ppm max.
Gold (Au)	0.1	ppm max.
Iron (Fe)	0.1	ppm max.
Lead (Pb)	0.1	ppm max.
Magnesium (Mg)	0.1	ppm max.
Manganese (Mn)	0.1	ppm max.
Nickel (Ni)	0.1	ppm max.
Potassium (K)	0.1	ppm max.
Sodium (Na)	0.1	ppm max.
Tin (Sn)	0.1	ppm max.
Zinc (Zn)	0.1	ppm max.

Cat No.	Package	Size
SM1213-G500ML	Amber Glass	500 ML
SM1213-G1L	Amber Glass	1 Litre
SM1213-G2.5L	Amber Glass	2.5 Litre

Cat No.	Package	Size
SM1213-G4L	Amber Glass	4 Litre
SM1213-M20L	Metal	20 Litre

## ZINC SULFATE HEPTAHYDRATE

<b>ZnSO<sub>4</sub> · 7H<sub>2</sub>O</b>	ZnSO <sub>4</sub> · 7H <sub>2</sub> O	FW. 287.54	Density 1 L =	1.97 Kg.	
	CAS-No.	7446-20-0	Melting Point	100 C°	
	UN No.	3077	EC-Index-No	030-006-00-9	
	EC No.	231-793-3	Packaging Group:	III	
Class:	9	GHS:	H302, H318, H410; P264, P270, P273, P280, P301 + P312, P305 + P351 + P338, P310, P330, P391		

## Zinc Sulfate Heptahydrate, AR

Code AR1214

### Specifications

Description	White crystalline powder	
Assay	99.5%	min.
Reaction	pH 4.4 - 6.0	
Insoluble matter	0.01%	max.
Total nitrogen (N)	0.0005%	max.
Chloride (Cl)	0.0005%	max.
Asenic (As)	0.0001%	max.
Cadmium (Cd)	0.0005%	max.

Calcium (Ca)	0.001%	max.
Copper (Cu)	0.0005%	max.
Iron (Fe)	0.0005%	max.
Lead (Pb)	0.001%	max.
Manganese (Mn)	0.0003%	max.
Potassium (K)	0.001%	max.
Sodium (Na)	0.001%	max.

Cat No.	Package	Size
AR1214-P500G	Plastic	500 G
AR1214-P1G	Plastic	1 KG

Cat No.	Package	Size
AR1214-P5KG	Plastic	5 KG
AR1214-P25KG	Plastic	25 KG



## SAFETY WITH RCI LABSCAN

Chemical product can be harmful and should only be handled by trained personnel who are familiar with the potential hazards.

Working with chemical requires a responsible attitude from the user and purchaser. RCI Labscan can not and will not take responsibility for the applications of our products.

Hazardous products are labeled with appropriate hazard symbols along with relevant risk and safety phrases. However, products that are labeled without hazard symbols or risk and safety phrases do not imply that safety precaution is not necessary.

Safety data sheet is available on request or to be downloaded from RCI Labscan website : [www.rcilabscan.com](http://www.rcilabscan.com)



## HAZARD SYMBOLS














GHS Pictogram (According to Globally Harmonized System of Classification and Labelling of Chemicals) and EC Directive 1272/2008.















 Flammable	<p><b>Hazard:</b> Flammable substances. Self-reactive substances pyrophoric and self-heating substances.</p> <p><b>Precaution:</b> Keep away from all sources of ignition. No smoking, keep container tightly.</p>	 Hazardous	<p><b>Hazard:</b> Skin irritant. Eyes irritant. Sensitization (dermal).</p> <p><b>Precaution:</b> A substance which may have an irritating effect on skin, eyes and respiratory organs, possibility of sensitization by skin contact.</p>
 Oxidizing	<p><b>Hazard:</b> Oxidizing substances. Organic peroxides.</p> <p><b>Precaution:</b> Oxidizing substances can cause fire in contact with combustible material or promote fire once started and impede fire fighting. Do not breath vapour</p>	 Environmental Hazard	<p><b>Hazard:</b> Environmental toxicity.</p> <p><b>Precaution:</b> Toxic for aquatic organisms. May cause long term adverse effects in the aquatic environment. Do not allow to enter waters, waste water or soil.</p>
 Corrosive	<p><b>Hazard:</b> Skin corrosive. Eyes corrosive. Corrosive to metals. Causes burns.</p> <p><b>Precaution:</b> Contact with these substances causes destruction of living tissue as well as equipment. Do not inhale vapor. Never add water to this product.</p>	 Explosive	<p><b>Hazard:</b> Explosives substances or articles. Self-reactive substances.</p> <p><b>Precaution:</b> A substance which either may explode under the effect of flame or which is more sensitive to shocks or friction than disturbance.</p>
 Human Health	<p><b>Hazard:</b> Sensitization (Respiratory) Mutagenicity. Carcinogenicity. Reproductive toxicity. Target organ toxicity.</p> <p><b>Precaution:</b> A substance which if inhaled, ingested or allowed to penetrate the skin may involve limited health risks. Possible risk of irreversible effects by immediate, prolonged or repeated exposure to these substances.</p>	 compressed gase	<p><b>Hazard:</b> Associated with compressed gase include oxygen displacemnt, fires, explosions, and toxic gas exposures as well as the physical hazards associated with high pressure system.</p>
 Toxic	<p><b>Hazard:</b> Acute toxicity.</p> <p><b>Precaution:</b> All contact with the human body must be avoided as it may cause severe or lethal damage to health. A substance which if inhaled, ingested or allowed to penetrate the skin may cause serious or chronic health damage and even death. Possible risk of irreversible damage by immediate, prolonged or repeated exposure.</p>		



## HAZARDOUS TRANSPORTATION AND HANDLING CONCERNS

Hazardous materials are classified by the tariff system. It is important for international shipment of hazardous materials. It is shown in IMDG code (International Maritime Organization of the UN). Transportation of dangerous Substances as following according to Recommendation on the Transport of Dangerous Goods, Model Regulation, Sixteenth revised edition, United Nations.

No.	CLASS	Division	Pictogram
1	Explosive substances or articles	1.1 Substance and article which have a mass explosion hazard	
		1.2 Substances and articles which have a projection hazard but not a mass explosion hazard	
		1.3 Substance and article which have a fire hazard and either a minor 6 post hazard or a minor projection hazard or both, but not a mass explosion hazard	
		1.4 Substance and article which present no significant hazard	
		1.5 Very insensitive substances which have a mass explosion hazard	
		1.6 Extremely insensitive articles which do not have a mass explosion hazard	
2	Gases	2.1) Flammable gases	 
		2.2) Non-flammable, non-toxic gases	 
		2.3) Toxic gases	
3	Flammable liquids		 

No.	CLASS	Division	Pictogram
4	Flammable solids; substances liable to spontaneous combustion; substances which, on contact with water, emit flammable gases	4.1) Flammable solid, self-reactive substances, solid desensitized explosives and polymerizing substances	
		4.2) Substances liable to spontaneous combustion	
		4.3) Substances which, in contact with water, emit flammable gases	 
5	Oxidizing substances and organic peroxides	5.1) Oxidizing substances	
		5.2) Organic peroxides	 
6	Toxic and infectious substances	6.1) Toxic substances	
		6.2) Infectious substances	
7	Radioactive material		 
8	Corrosive substances		
9	Miscellaneous dangerous substances and articles, including environmentally hazardous substances		 



# The GHS Hazard Grouping

## The Physical Hazard



### Flammable

**Description**

- Flammables (Gases, Aerosols, Liquids and Solids)
- Self-Heating Substances
- Substances which in contact with Water Emit Flammable Gases

**Product Samples**

- Acetic Acid
- Cyclohexane
- Acetone
- Acetonitrile
- Chlorobenzene
- Ethyl Acetate
- Methanol
- Methyl Ethyl Ketone
- n-Heptane
- n-Hexane
- Petroleum Ether
- Propan-2-ol
- Toluene



### Oxidizing

• Oxidizing (Gases, Liquids, Solids)

- Ammonium Persulfate
- Nitric Acid
- Potassium Iodate
- Potassium Nitrate
- Silver Nitrate
- Sodium Nitrate
- Sodium Nitrite



### Corrosive

• Substances Corrosive to Metal

- Acetic Acid
- Hydrochloric Acid
- Nitric Acid
- Phosphoric Acid
- Potassium Hydroxide
- Silver Nitrate
- Sodium Hydroxide
- Sulfuric Acid



### Explosive

• Explosives

• Self-Reactive Substances

• Organic Peroxides



### Compressed gas

• Gases Under Pressure



## The Health Hazard



### Human Health

**Description**

- Germ Cell Mutagenicity
- Carcinogenicity
- Toxic to Reproduction
- Aspiration Toxicity
- Specific Target Organ/ Systemic Toxicity – Single Exposure
- Specific Target Organ/ Systemic Toxicity – Repeated Exposure

**Product Samples**

- Chloroform
- Cyclohexane
- 1,2-Dichloroethane
- Dichloromethane
- Dimethylformamide
- 1,4-Dioxan
- n-Octane
- n-Pentane
- Petroleum Ether
- n-Heptane
- Tetrahydrofuran
- Toluene
- 2,2,4-Trimethylpentane
- Xylene



### Corrosive

• Skin Corrosive/Irritation

• Serious Eye Damage/Eye Irritation

- Acetic Acid
- Hydrochloric Acid
- Nitric Acid
- Phosphoric Acid
- Potassium Hydroxide
- Silver Nitrate
- Sodium Hydroxide
- Sulfuric Acid



### Toxic

• Acute Toxicity (High)

- Chloroform
- Formaldehyde
- Methanol
- Methyl Orange
- Sodium Nitrite

## The Environmental Hazard



### Environmental Hazard

**Description**

• Hazardous to the Aquatic Environment

• Hazardous to the Ozone Layer

**Product Samples**

- Cyclohexane
- Iodine (Resublimed)
- n-Hexane
- Petroleum Ether
- Silver Nitrate



# Safety with

Hi guys, Mr.RCI Labscan is here to guide you to transport the chemicals safely!

To start with, use your dominant hand to hold the bottle handle.

Then use the other hand to hold on the bottle, and just pull it straight up.

After that, move the other hand to support the bottom of the bottle while carrying.

Lastly, just use a cart if it is too heavy.

\*Make sure that the chemicals are placed at least 10 cm. from the edges while working.





## Hazard statement codes for physical hazards

H200:	Unstable explosive
H201:	Explosive; mass explosion hazard
H202:	Explosive; severe projection hazard
H203:	Explosive; fire, blast or projection hazard
H204:	Fire or projection hazard
H205:	May mass explode in fire
H206:	Fire, blast or projection hazard; increased risk of explosion if desensitizing agent is reduced
H207:	Fire or projection hazard; increased risk of explosion if desensitizing agent is reduced
H208:	Fire hazard; increased risk of explosion if desensitizing agent is reduced
H220:	Extremely flammable gas
H221:	Flammable gas
H222:	Extremely flammable aerosol
H223:	Flammable aerosol
H224:	Extremely flammable liquid and vapour
H225:	Highly flammable liquid and vapour
H226:	Flammable liquid and vapour
H227:	Combustible liquid
H228:	Flammable solid
H229:	Pressurized container: may burst if heated
H230:	May react explosively even in the absence of air
H231:	May react explosively even in the absence of air at elevated pressure and/or temperature
H232:	May ignite spontaneously if exposed to air
H240:	Heating may cause an explosion
H241:	Heating may cause a fire or explosion
H242:	Heating may cause a fire
H250:	Catches fire spontaneously if exposed to air
H251:	Self-heating; may catch fire
H252:	Self-heating in large quantities; may catch fire
H260:	In contact with water releases flammable gases which may ignite spontaneously
H261:	In contact with water releases flammable gas
H270:	May cause or intensify fire; oxidizer
H271:	May cause fire or explosion; strong oxidizer
H272:	May intensify fire; oxidizer
H280:	Contains gas under pressure; may explode if heated
H281:	Contains refrigerated gas; may cause cryogenic burns or injury
H290:	May be corrosive to metals

## Hazard statement codes for health hazards

H300:	Fatal if swallowed
H301:	Toxic if swallowed
H302:	Harmful if swallowed
H303:	May be harmful if swallowed
H304:	May be fatal if swallowed and enters airways
H305:	May be harmful if swallowed and enters airways
H310:	Fatal in contact with skin
H311:	Toxic in contact with skin
H312:	Harmful in contact with skin
H313:	May be harmful in contact with skin
H314:	Causes severe skin burns and eye damage
H315:	Causes skin irritation
H316:	Causes mild skin irritation
H317:	May cause an allergic skin reaction
H318:	Causes serious eye damage
H319:	Causes serious eye irritation
H320:	Causes eye irritation
H330:	Fatal if inhaled
H331:	Toxic if inhaled
H332:	Harmful if inhaled
H333:	May be harmful if inhaled
H334:	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335:	May cause respiratory irritation
H336:	May cause drowsiness or dizziness
H340:	May cause genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H341:	Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H350:	May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H351:	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H360:	May damage fertility or the unborn child (state specific effect if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H361:	Suspected of damaging fertility or the unborn child (state specific effect if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H362:	May cause harm to breast-fed children
H370:	Causes damage to organs (or state all organs affected, if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

H371:	May cause damage to organs (or state all organs affected, if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H372:	Causes damage to organs (state all organs effected,if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H373:	May cause damage to organs (state all organs effected,if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H300+H310:	Fatal if swallowed or in contact with skin
H300+H330:	Fatal if swallowed or if inhaled
H310+H330:	Fatal in contact with skin or if inhaled
H300+H310+H330:	Fatal if swallowed, in contact with skin or if inhaled
H310+H311:	Toxic if swallowed or in contact with skin
H301+H331:	Toxic if swallowed or if inhaled
H311+H331:	Toxic in contact with skin or if inhaled
H301+H311+H331:	Toxic if swallowed, in contact with skin or if inhaled
H302+H312:	Harmful if swallowed or in contact with skin
H302+H332:	Harmful if swallowed or if inhaled
H312+H332:	Harmful in contact with skin or if inhaled
H302+H312+H332:	Harmful if swallowed, in contact with skin or if inhaled
H303+H313:	May be harmful if swallowed or in contact with skin
H303+H333:	May be harmful if swallowed or if inhaled
H313+H333:	May be harmful in contact with skin or if inhaled
H303+H313+H333:	May be harmful if swallowed, in contact with skin or if inhaled
H315+H320:	Causes skin and eye irritation

## Hazard statement codes or environmental hazards

H400:	Very toxic to aquatic life
H401:	Toxic to aquatic life
H402:	Harmful to aquatic life
H410:	Very toxic to aquatic life with long lasting effects
H411:	Toxic to aquatic life with long lasting effects
H412:	Harmful to aquatic life with long lasting effects
H413:	May cause long lasting harmful effects to aquatic life
H420:	Harms public health and the environment by destroying ozone in the upper atmosphere

## Codification of general precautionary statements

P101:	If medical advice is needed, have product container or label at hand
P102:	Keep out of reach of children
P103:	Read label before use

## Codification of prevention precautionary statements

P201:	Obtain special instructions before use
P202:	Do not handle until all safety precautions have been read and understood
P210:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211:	Do not spray on an open flame or other ignition source
P212:	Avoid heating under confinement or reduction of the desensitized agent
P220:	Keep away from clothing and other combustible materials
P222:	Do not allow contact with air
P223:	Do not allow contact with water
P230:	Keep wetted with for substances and mixtures which are wetted, diluted, dissolved or suspended with a plegmatizer in order to suppress their explosive properties. Manufacturer/ supplier or the competent authority to specify appropriate material
P231:	Handle and store contents under inert gas. Manufacturer/supplier or the competent authority to specify appropriate liquid or gas if "inert gas" is not appropriate
P233:	Keep container tightly closed
P234:	Keep only in original packaging
P235:	Keep cool
P240:	Ground and bond container and receiving equipment
P241:	Use explosion-proof
P242:	Use non-sparking tools
P243:	Take action to prevent static discharges
P244:	Keep valves and fittings free from oil and grease
P250:	Do not subject to grinding/shock/friction if the explosive is mechanically sensitive. Manufacturer/supplier or the competent authority to specify applicable rough handling.
P251:	Do not pierce or burn, even after use
P260:	Do not breathe dust/fume/gas/mist/vapours/spray
P261:	Avoid breathing dust/fume/gas/mist/vapours/spray
P262:	Do not get in eyes, on skin, or on clothing
P263:	Avoid contact during pregnancy and while nursing
P264:	Wash ... thoroughly after handling
P270:	Do not eat, drink or smoke when using this product
P271:	Use only outdoors or in a well-ventilated area
P272:	Contaminated work clothing should not be allowed out of the workplace
P273:	Avoid release to the environment
P280:	Wear protective gloves/protective clothing/eye protection/face protection
P282:	Wear cold insulating gloves and either face shield or eye protection
P283:	Wear fire resistant or flame retardant clothing
P284:	[In case of inadequate ventilation] wear respiratory protection
P231+P232:	Handle and store contents under inert gas/... Protect from moisture

## Codification of response precautionary statements

P310:	Immediately call a POISON CENTER/doctor. Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.
P311:	Call a POISON CENTER/doctor. Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.
P312:	Call a POISON CENTER/doctor/... / if you feel unwell
P313:	Get medical advice/attention
P314:	Get Medical advice/attention if you feel unwell
P315:	Get immediate medical advice/attention
P320:	Specific treatment is urgent (see ... on this label)
P321:	Specific treatment (see ... on this label)
P330:	Rinse mouth
P331:	Do NOT induce vomiting
P334:	Immerse in cool water[or wrap in wet bandages]
P335:	Brush off loose particles from skin
P336:	Thaw frosted parts with lukewarm water. Do not rub affected areas
P338:	Remove contact lenses, if present and easy to do. continue rinsing
P340:	Remove person to fresh air and keep comfortable for breathing
P342:	If experiencing respiratory symptoms:
P351:	Rinse cautiously with water for several minutes
P352:	Wash with plenty of water. Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.
P353:	Rinse skin with water [or shower]
P360:	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes
P361:	Take off immediately all contaminated clothing
P362:	Take off contaminated clothing
P363:	Wash contaminated clothing before reuse
P364:	And wash it before reuse
P372:	Explosion risk
P373:	DO NOT fight fire when fire reaches explosives
P375:	Fight fire remotely due to the risk of explosion
P376:	Stop leak if safe to do so
P377:	Leaking gas fire: Do not extinguish, unless leak can be stopped safely
P378:	Use ... to extinguish
P380:	Evacuate area
P381:	In case of leakage, eliminate all ignition sources
P390:	Absorb spillage to prevent material - damage
P391:	Collect spillage
P301+P310:	IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P301+P312:	IF SWALLOWED: Call a POISON CENTER / doctor/.../if you feel unwell
P302+P334:	IF ON SKIN: Immerse in cool water[or wrap in wet bandages]

P302+P352:	IF ON SKIN: Wash with plenty of water. Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.
P304+P312:	IF INHALED: Call a POISON CENTER /doctor/.../if you feel unwell
P304+P340:	IF INHALED: Remove person to fresh air and keep comfortable for breathing
P306+P360:	IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes
P308+P311:	IF exposed or concerned: Call a POSION CENTER/doctor. Manufacturer/supplier or the content competent authority to specify the appropriate source of emergency medical advice.
P308+P313:	IF exposed or concerned: Get medical advice/attention
P332+P313:	If skin irritation occurs: Get medical advice/attention
P333+P313:	If skin irritation or a rash occurs: Get medical advice/attention
P336+P315:	Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical advice/attention
P337+P313:	If eye irritation persists: Get medical advice/attention
P342+P311:	If experiencing respiratory symptoms: Call a POISON CENTER /doctor. Manufacturer/supplier or the content competent authority to specify the appropriate source of emergency medical advice.
P361+P364:	Take off immediately all contaminated clothing and wash it before reuse
P362+P364:	Take off contaminated clothing and wash it before reuse
P370+P376:	In case of fire: Stop leak if safe to do so
P370+P378:	In case of fire: Use ... for extinguish
P301+P330+P331:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P335+P334:	IF ON SKIN: Brush if loose particles from skin. Immerse in cool water [or wrap in wet bandages]
P303+P361+P353:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]
P305+P351+P338:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P370+P380+P375:	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion
P371+P380+P375:	In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion
P370+P372+P380+P373:	In case of fire: Explosion risk Evacuate area. DO NOT fight fire when fire reaches explosives.
P370+P380+P375[+P378]:	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. [Use...to extinguish]



## Codification of storage precautionary statements

P401:	Store in accordance with Manufacturer/supplier or the competent authority to specify local/regional/national/international regulations as applicable
P402:	Store in a dry place
P403:	Store in a well-ventilated place
P404:	Store in a closed container
P405:	Store locked up
P406:	Store in a corrosive resistant/... container with a resistant inner liner
P407:	Maintain air gap between stacks or pallets
P410:	Protect from sunlight
P411:	Store at temperatures not exceeding ... °C/... °F
P412:	Do not expose to temperatures exceeding 50°C/122°F
P413:	Store bulk masses greater than ...kg/...lbs at temperatures not exceeding ...°C/... °F
P420:	Store separately.
P402+P404:	Store in a dry place. Store in a closed container
P403+P233:	Store in a well-ventilated place. Keep container tightly closed
P403+P235:	Store in a well-ventilated place. Keep cool
P410+P403:	Protect from sunlight. Store in a well-ventilated place
P410+P412:	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F

## Codification of disposal precautionary statements

P501:	Dispose of contents/container to in accordance with local/regional/national/international regulation (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.
P501(cont'd):	Dispose of contents/container to in accordance with local/regional/national/international regulation (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirement apply to contents, container or both.
P502:	Refer to manufacturer or supplier for information on recovery or recycling

## European Union Supplemental Hazard Information (EUH-Statements)

### Physical properties

EUH001:	Explosive when dry
EUH006:	Explosive with or without contact with air
EUH014:	Reacts violently with water
EUH018:	In use may form flammable/explosive vapour-air mixture
EUH019:	May form explosive peroxides
EUH044:	Risk of explosion if heated under confinement

## Health properties

EUH029:	Contact with water liberates toxic gas
EUH031:	Contact with acids liberates toxic gas
EUH032:	Contact with acids liberates very toxic gas
EUH066:	Repeated exposure may cause skin dryness or cracking
EUH070:	Toxic by eye contact
EUH071:	Corrosive to the respiratory tract

## Environmental properties

EUH059:	Hazardous to the ozone layer
---------	------------------------------

## Information on certain substances and mixtures

EUH201:	Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.
EUH201A:	Warning! Contains lead.
EUH202:	Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
EUH203:	Contains chromium(VI). May produce an allergic reaction.
EUH204:	Contains isocyanates. May produce an allergic reaction.
EUH205:	Contains epoxy constituents. May produce an allergic reaction.
EUH206:	Warning! Do not use together with other products. May release dangerous gases (chlorine).
EUH207:	Warning! Contains cadmium. Dangerous fumes are formed during use. See information supplied by the manufacturer. Comply with the safety instructions.
EUH208:	Contains <name of sensitising substance>. May produce an allergic reaction.
EUH209:	Can become highly flammable in use.
EUH209A:	Can become flammable in use.
EUH210:	Safety data sheet available on request.
EUH401:	To avoid risks to human health and the environment, comply with the instructions for use.

## Safety Information Risk and Safety Phrases

### Risk Phrases (R)

R1:	Explosive when dry
R2:	Risk of explosion by shock, friction, fire or other sources of ignition
R3:	Extreme risk of explosion by shock, friction, fire or other sources of ignition
R4:	Forms very sensitive explosive metallic compounds
R5:	Heating may cause an explosion
R6:	Explosive with or without contact with air
R7:	May cause fire
R8:	Contact with combustible material may cause fire
R9:	Explosive when mixed with combustible material
R10:	Flammable
R11:	Highly flammable
R12:	Extremely flammable
R14:	Reacts violently with water
R15:	Contact with water liberates extremely flammable gases

R16:	Explosive when mixed with oxidizing substances
R17:	Spontaneously flammable in air
R18:	In use, may form flammable/explosive vapor-air mixture
R19:	May form explosive peroxides
R20:	Harmful by inhalation
R21:	Harmful in contact with skin
R22:	Harmful if swallowed
R23:	Toxic by inhalation
R24:	Toxic in contact with skin
R25:	Toxic if swallowed
R26:	Very toxic by inhalation
R27:	Very toxic in contact with skin
R28:	Very toxic if swallowed
R29:	Contact with water liberates toxic gas.
R30:	Can become highly flammable in use
R31:	Contact with acids liberates toxic gas
R32:	Contact with acids liberates very toxic gas
R33:	Danger of cumulative effects
R34:	Causes burns
R35:	Causes severe burns
R36:	Irritating to eyes
R37:	Irritating to respiratory system
R38:	Irritating to skin
R39:	Danger of very serious irreversible effects
R40:	Limited evidence of a carcinogenic effect
R41:	Risk of serious damage to eyes
R42:	May cause sensitization by inhalation
R43:	May cause sensitization by skin contact
R44:	Risk of explosion if heated under confinement
R45:	May cause cancer
R46:	May cause heritable genetic damage
R48:	Danger of serious damage to health by prolonged exposure
R49:	May cause cancer by inhalation
R50:	Very toxic to aquatic organisms
R51:	Toxic to aquatic organisms
R52:	Harmful to aquatic organisms
R53:	May cause long-term adverse effects in the aquatic environment
R54:	Toxic to flora
R55:	Toxic to fauna
R56:	Toxic to soil organisms
R57:	Toxic to bees
R58:	May cause long-term adverse effects in the environment
R59:	Dangerous for the ozone layer

R60:	May impair fertility
R61:	May cause harm to the unborn child
R62:	Possible risk of impaired fertility
R63:	Possible risk of harm to the unborn child
R64:	May cause harm to breast-fed babies
R65:	Harmful: may cause lung damage if swallowed
R66:	Repeated exposure may cause skin dryness or cracking
R67:	Vapours may cause drowsiness and dizziness
R68:	Possible risk of irreversible effects

## Combination Risk Phrases (R)

R14/15:	Reacts violently with water, liberating extremely flammable gases
R15/29:	Contact with water liberates toxic, extremely flammable gases
R20/21:	Harmful by inhalation and in contact with skin
R20/22:	Harmful by inhalation and if swallowed
R20/21/22:	Harmful by inhalation, in contact with skin and if swallowed
R21/22:	Harmful in contact with skin and if swallowed
R23/24:	Toxic by inhalation and in contact with skin
R23/25:	Toxic by inhalation and if swallowed
R23/24/25:	Toxic by inhalation, in contact with skin and if swallowed
R24/25:	Toxic in contact with skin and if swallowed
R26/27:	Very toxic by inhalation and in contact with skin
R26/28:	Very toxic by inhalation and if swallowed
R26/27/28:	Very toxic by inhalation, in contact with skin and if swallowed
R27/28:	Very toxic in contact with skin and if swallowed
R36/37:	Irritating to eyes and respiratory system
R36/38:	Irritating to eyes and skin
R36/37/38:	Irritating to eyes, respiratory system and skin
R37/38:	Irritating to respiratory system and skin
R39/23:	Toxic: danger of very serious irreversible effects through inhalation
R39/24:	Toxic: danger of very serious irreversible effects in contact with skin
R39/25:	Toxic: danger of very serious irreversible effects if swallowed
R39/23/24:	Toxic: danger of very serious irreversible effects through inhalation and in contact with skin
R39/23/25:	Toxic: danger of very serious irreversible effects through inhalation and if swallowed
R39/24/25:	Toxic: danger of very serious irreversible effects in contact with skin and if swallowed
R39/23/24/25:	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
R39/26:	Very Toxic: danger of very serious irreversible effects through inhalation
R39/27:	Very Toxic: danger of very serious irreversible effects in contact with skin
R39/28:	Very Toxic: danger of very serious irreversible effects if swallowed
R39/26/27:	Very Toxic: danger of very serious irreversible effects through inhalation and in contact with skin
R39/26/28:	Very Toxic: danger of very serious irreversible effects through inhalation and if swallowed
R39/27/28:	Very Toxic: danger of very serious irreversible effects in contact with skin and if swallowed

R39/26/27/28:	Very Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
R42/43:	May cause sensitization by inhalation and skin contact
R48/20:	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R48/21:	Harmful: danger of serious damage to health by prolonged exposure in contact with skin
R48/22:	Harmful: danger of serious damage to health by prolonged exposure if swallowed
R48/20/21:	Harmful: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin
R48/20/22:	Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed
R48/21/22:	Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
R48/20/21/22:	Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed
R48/23:	Toxic: danger of serious damage to health by prolonged exposure through inhalation
R48/24:	Toxic: danger of serious damage to health by prolonged exposure in contact with skin
R48/25:	Toxic: danger of serious damage to health by prolonged exposure if swallowed
R48/23/24:	Toxic: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin
R48/23/25:	Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed
R48/24/25:	Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
R48/23/24/25:	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed
R50/53:	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51/53:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R52/53:	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R68/20:	Harmful: possible risk of irreversible effects through inhalation
R68/21:	Harmful: possible risk of irreversible effects in contact with skin
R68/22:	Harmful: possible risk of irreversible effects if swallowed
R68/20/21:	Harmful: possible risk of irreversible effects through inhalation and in contact with skin
R68/20/22:	Harmful: possible risk of irreversible effects through inhalation and if swallowed
R68/21/22:	Harmful: possible risk of irreversible effects in contact with skin and if swallowed
R68/20/21/22:	Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed

## Safety Phrases (S)

S1:	Keep locked up
S2:	Keep out of the reach of children
S3:	Keep in a cool place
S4:	Keep away from living quarters under... (appropriate liquid to be specified by the manufacturer)
S5:	Keep contents under ... (appropriate liquid to be specified by the manufacturer)
S6:	Keep under ... (inert gas to be specified by the manufacturer)

- S7: Keep container tightly closed
- S8: Keep container dry
- S9: Keep container in a well-ventilated place
- S12: Do not keep the container sealed
- S13: Keep away from food, drink and animal feeding stuffs
- S14: Keep away from ... (incompatible materials to be indicated by the manufacturer)
- S15: Keep away from heat
- S16: Keep away from sources of ignition - No smoking
- S17: Keep away from combustible material
- S18: Handle and open container with care
- S20: When using do not eat or drink
- S21: When using do not smoke
- S22: Do not breathe dust
- S23: Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the manufacturer)
- S24: Avoid contact with skin
- S25: Avoid contact with eyes
- S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S27: Take off immediately all contaminated clothing
- S28: After contact with skin, wash immediately with plenty of ... (to be specified by the manufacturer)
- S29: Do not empty into drains
- S30: Never add water to this product
- S33: Take precautionary measures against static discharges
- S34: Avoid shock and friction
- S35: This material and its container must be disposed of in a safe way
- S36: Wear suitable protective clothing
- S37: Wear suitable gloves
- S38: In case of insufficient ventilation, wear suitable respiratory equipment
- S39: Wear eye/face protection
- S40: To clean the floor and all objects contaminated by this material use ... (to be specified by the manufacturer)
- S41: In case of fire and/or explosion do not breathe fumes
- S42: During fumigation/spraying wear suitable respiratory equipment (appropriate wording to be specified by the manufacturer)
- S43: In case of fire use ... (indicate in the space the precise type of fire-fighting equipment. If water increases the risk add – “Never use water”)
- S45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)
- S46: If swallowed, seek medical advice immediately and show this container or label
- S47: Keep at temperature not exceeding ... °C (to be specified by the manufacturer)
- S48: Keep wet with ... (appropriate material to be specified by the manufacturer)
- S49: Keep only in the original container
- S50: Do not mix with ... (to be specified by the manufacturer)
- S51: Use only in well-ventilated areas

S52:	Not recommended for interior use on large surface areas
S53:	Avoid exposure - obtain special instructions before use
S55:	Treat using the best available techniques before discharge into drains or the aquatic environment
S56:	Dispose of this material and its container at hazardous or special waste collection point
S57:	Use appropriate container to avoid environmental contamination
S59:	Refer to manufacturer/supplier for information on recovery/recycling
S60:	This material and its container must be disposed of as hazardous waste
S61:	Avoid release to the environment. Refer to special instructions/safety data sheet
S62:	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label
S63:	In case of accident by inhalation: remove casualty to fresh air and keep at rest
S64:	If swallowed, rinse mouth with water (only if the person is conscious)

## Combination Safety Phrases (S)

S1/2:	Keep locked up and out of the reach of children
S3/7:	Keep container tightly closed in a cool place
S3/7/9:	Keep container tightly closed in a cool, well-ventilated place
S3/9/14:	Keep in a cool, well-ventilated place away from ... (incompatible materials to be indicated by the manufacturer)
S3/9/14/49:	Keep only in the original container in a cool, well-ventilated place away from ... (incompatible materials to be indicated by the manufacturer)
S3/9/49:	Keep only in the original container in a cool, well-ventilated place
S3/14:	Keep in a cool place away from ... (incompatible materials to be indicated by the manufacturer)
S7/8:	Keep container tightly closed and dry
S7/9:	Keep container tightly closed and in a well-ventilated place
S7/47:	Keep container tightly closed and at temperature not exceeding ... °C (to be specified by the manufacturer)
S20/21:	When using do not eat, drink or smoke
S24/25:	Avoid contact with skin and eyes
S27/28:	After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of ... (to be specified by the manufacturer)
S29/35:	Do not empty into drains; dispose of this material and its container in a safe way
S29/56:	Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point
S36/37:	Wear suitable protective clothing and gloves
S36/37/39:	Wear suitable protective clothing, gloves and eye/face protection
S36/39:	Wear suitable protective clothing and eye/face protection
S37/39:	Wear suitable gloves and eye/face protection
S47/49:	Keep only in the original container at temperature not exceeding ... °C (to be specified by the manufacturer)

Source: United Nations, 2015, [http://www.unece.org/trans/danger/publi/ghs/ghs\\_rev06/06files\\_e.html](http://www.unece.org/trans/danger/publi/ghs/ghs_rev06/06files_e.html)

## CONVERSION FACTORS

Below are instructions for converting factors, include changing acres to hectares, Btu/hour to horsepower, centimeters to inches, degrees to radian, feet to miles, furlongs to feet, liters to gallons

To change	To	Multiply by
acres	hectares	0.4047
acres	square feet	43,560
acres	square miles	0.001562
atmospheres	cms. of mercury	76
Btu/hour	horsepower	0.000393
Btu	kilowatt-hour	0.0002931
Btu/hour	watts	0.2931
bushels	cubic inches	2150.4
bushels (U.S)	hectoliters	0.3524
centimeters	inches	0.3937
centimeters	feet	0.03281
cubic feet	cubic meter	0.0283
cubic meters	cubic feet	35.3145
cubic meters	cubic yards	1.3079
cubic yards	cubic meters	0.7646
degrees	radians	0.01745
dynes	grams	0.00102
fathoms	feet	6
feet	meters	0.3048
feet	miles(nautical)	0.0001645
feet	miles(statute)	0.0001894
feet/second	mile/hour	0.6818
furlongs	feet	660
furlongs	miles	0.125
gallons (U.S.)	liters	3.7853
grains	grams	0.0648
grams	grains	15.4324
grams	ounces (avdp)	0.0353
grams	pounds	0.002205
hectares	acres	2.471
hectoliters	bushels (U.S.)	2.8378
horsepower	watts	745.7
horsepower	Btu/hour	2.547
hours	days	0.04167



inches	millimeters	25.4
inches	centimeters	2.54
kilograms	ponds (avdp or troy)	2.2046
kilometers	miles	0.6214
kilowatt-hour	Btu	3412
knots	nautical miles/hour	1
knots	statute miles/hour	1.151
liters	gallons (U.S.)	0.2642
liters	pecks	0.1135
liters	pints (dry)	1.8162
liters	pints (liquid)	2.1134
liters	quarts (dry)	0.9081
liters	quarts (liquid)	1.0567
meters	feet	3.2808
meters	miles	0.0006214
meters	yards	1.0936
metric tons	tons (long)	0.9842
metric tons	tons (short)	1.1023
miles	kilometers	1.6093
miles	feet	5280
miles (nautical)	miles (statute)	1.1516
mile (statute)	miles (nautical)	0.8684
mile/hour	feet/minute	88
millimeters	inches	0.0394
ounces (avdp)	grams	28.3495
ounces	pounds	0.0625
ounces (troy)	ounces (avdp)	1.09714
pecks	liters	8.8096
pints (dry)	liters	0.5506
pints (liquid)	liters	0.4732
pounds (ap or troy)	kilograms	0.3732
pounds (avdp)	kilograms	0.4536
pounds	ounces	16
quarts (dry)	liters	1.1012
quarts (liquid)	liters	0.9463
radians	degrees	57.3
rods	meters	5.029
rods	feet	16.5
square feet	square meters	0.0929
square kilometers	square miles	0.3861
square meters	square feet	10.7639
square meters	square yards	1.196
square miles	square kilometers	2.59

square yards	square meters	0.8361
tons (long)	metric tons	1.016
tons (short)	metric tons	0.9072
tons (long)	pounds	2240
tons (short)	pounds	2000
watts	Btu/hour	3.4121
watts	horsepower	0.001341
yards	meters	0.9144
yards	miles	0.0005682

NOTE: avdp = avoirdupois weight, ap = apothecaries' weight.

## FRACTIONS

Symbol	Prefix	Factor		
E	exa	1 000 000 000 000 000 000	=	10 <sup>18</sup> quintillion
P	peta	1 000 000 000 000 000	=	10 <sup>15</sup> quadrillion
T	tera	1 000 000 000 000	=	10 <sup>12</sup> trillion
G	giga	1 000 000 000	=	10 <sup>9</sup> billion
M	mega	1 000 000	=	10 <sup>6</sup> million
k	kilo	1 000	=	10 <sup>3</sup> thousand
h	hecto	100	=	10 <sup>2</sup> hundred
da	deca	10	=	10 <sup>1</sup> ten
d	deci	0.1	=	10 <sup>-1</sup> tenth
c	centi	0.01	=	10 <sup>-2</sup> hundredredth
m	milli	0.001	=	10 <sup>-3</sup> thousandth
μ	micro	0.000 001	=	10 <sup>-6</sup> millionth
n	nano	0.000 000 001	=	10 <sup>-9</sup> billionth
p	pico	0.000 000 000 001	=	10 <sup>-12</sup> trillionth
f	femto	0.000 000 000 000 001	=	10 <sup>-15</sup> quadrillionth
a	atto	0.000 000 000 000 000 001	=	10 <sup>-18</sup> quintillionth

NOTE: 10<sup>9</sup> = 1 billion is United Nations usage in English by analogy, so is 10<sup>-9</sup> = 1billionth

## UNITS OF MEASURE CONVERSION FACTORS

Percent	Parts per Million	Parts per Billion	Parts per Trillion
.001%	10 ppm	-	-
.0001%	1 ppm	1,000 ppb	1,000,000 ppt
.00001%	.1 ppm	100 ppb	100,000 ppt
.0000001%	.01 ppm	10 ppb	10,000 ppt
-	.001 ppm	1 ppb	1,000 ppt
-	.00001 ppm	.01 ppb	10 ppt
-	.000001 ppm	.001 ppb	1 ppt

## VOLUME CONVERSION TABLE (METRIC AND U.S. LIQUID MEASURES)

From	To in <sup>3</sup>	To ft <sup>3</sup>	To yd <sup>3</sup>	To fl pt	To fl oz	To fl qt	To gal	To liter	To m <sup>3</sup>	To cm <sup>3</sup>
cm <sup>3</sup>	0.06102	3.53x10 <sup>-5</sup>	1.31x10 <sup>-6</sup>	0.00211	0.03381	0.0016	2.64x10 <sup>-4</sup>	0.001	1x10 <sup>-6</sup>	1
liter	61.02	0.03532	0.00131	2.113	33.81	1.057	0.2642	1	0.001	1000
m <sup>3</sup>	6.10x10 <sup>4</sup>	35.31	1.308	2113	3.38x10 <sup>4</sup>	1057	264.2	1000	1	1x10 <sup>6</sup>
in	1	5.79x10 <sup>-4</sup>	2.14x10 <sup>-5</sup>	0.03463	0.5541	0.01732	0.00433	0.01639	1.64x10 <sup>-5</sup>	16.39
ft	1728	1	0.03704	69.84	957.5	29.92	7.481	28.32	0.02832	2.83x10 <sup>4</sup>
yd <sup>3</sup>	4.67x10 <sup>4</sup>	27	1	1616	2.59x10 <sup>4</sup>	807.9	202	764.5	0.7645	7.65x10 <sup>5</sup>
fl oz	1.805	0.0010 <sup>4</sup>	3.87x10 <sup>-5</sup>	0.0625	1	0.03125	0.00781	0.02957	2.96x10 <sup>-5</sup>	29.57
fl pt	28.88	0.01671	619x10 <sup>-4</sup>	1	16	0.6	0.125	0.4732	473x10 <sup>-4</sup>	473.2
fl qt	57.75	0.03342	0.00124	2	32	1	0.25	0.9463	9.46x10 <sup>-4</sup>	946.4
gal	231	0.1337	0.00495	8	128	4	1	3.786	0.00379	3785

## LENGTH CONVERSION TABLE

From	To in	To ft	To mile	To m	To km	To cm
cm	0.3937	0.03281	6.214x10 <sup>-6</sup>	0.01	1x10 <sup>-5</sup>	1
m	39.37	3.281	6.214x10 <sup>-4</sup>	1	0.001	100
km	3.94x10 <sup>4</sup>	3281	0.6214	1000	1	1x10 <sup>5</sup>
in	1	0.08333	1.578x10 <sup>-5</sup>	0.0254	2.54x10 <sup>-5</sup>	2.54
ft	12	1	18.94x10 <sup>-4</sup>	0.3048	3.048x10 <sup>-4</sup>	30.48
mile	6.336x10 <sup>4</sup>	5280	1	1609	1.609	1.609x10 <sup>5</sup>

## WEIGHT CONVERSION TABLE

From	To grain	To lb	To metric ton	To oz	To kg	To g
g	15.43	0.0022	1x10 <sup>-6</sup>	0.03527	0.001	1
kg	1.54x10 <sup>4</sup>	2.205	0.001	35.27	1	1000
metric ton	1.54x10 <sup>7</sup>	2205	1	3.53x10 <sup>4</sup>	1000	1x10 <sup>6</sup>
grain	1	1.43x10 <sup>-4</sup>	6.48x10 <sup>-5</sup>	2.29x10 <sup>-3</sup>	6.48x10 <sup>-5</sup>	6.48x10 <sup>-2</sup>
oz	437.5	0.0625	2.83x10 <sup>-5</sup>	1	0.02835	28.35
lb	7000	1	4.54x10 <sup>-4</sup>	16	0.4536	453.6

Remark: To convert from a unit shown in the left column, multiply by the factor listed in the column for the desired unit

## TEMPERATURE CONVERSION FORMULAS

From	To Fahrenheit	To Celsius	To Kelvin
Fahrenheit (F)	F	$(F-32) * 5/9$	$(F-32) * 5/9 + 273.15$
Celsius (C or °)	$(C * 9/5) + 32$	C	C + 23.15
Kelvin (K)	$(K-273.15) * 9/5 + 32$	K - 273.15	K

## ATOMIC WEIGHTS OF THE ELEMENTS

List of Element in Atomic Number Order					List of Element in Atomic Number Order				
At NO	Symbol	Name	Atomic WT	Notes	At NO	Symbol	Name	Atomic WT	Notes
1	H	Hydrogen	1.008	3,6	89	Ac	Actinium	[227]	4
2	He	Helium	4.002602(2)	1,2	13	Al	Aluminium	26.9815386(8)	
3	Li	Lithium	6.94	1,2	95	Am	Americium	[243]	4
4	Be	Beryllium	9.012182(3)		51	Sb	Antimony	121.760(1)	1
5	B	Boron	10.81	3,6	18	Ar	Argon	39.948(1)	1,2
6	C	Carbon	12.011	6	33	As	Arsenic	74.92160(2)	
7	N	Nitrogen	14.007	6	85	At	Astatine	[210]	4
8	O	Oxygen	15.999	6	56	Ba	Barium	137.327(7)	
9	F	Fluorine	18.9984032(5)		97	Bk	Berkelium	[247]	4
10	Ne	Neon	20.1797(6)	1,3	4	Be	Beryllium	9.012182(3)	
11	Na	Sodium	22.98976928(2)		83	Bi	Bismuth	208.98040(1)	
12	Mg	Magnesium	24.3050(6)		107	Bh	Bohrium	[272]	4
13	Al	Aluminium	26.9815386(8)		5	B	Boron	10.81	3,6
14	Si	Silicon	28.085	6	35	Br	Bromine	79.904(1)	
15	P	Phosphorus	30.973762(2)		48	Cd	Cadmium	112.411(8)	
16	S	Sulfur	32.06	6	55	Cs	Caesium	132.9054519(2)	
17	Cl	chlorine	35.45	3,6	20	Ca	Calcium	40.078(4)	1
18	Ar	Argon	39.948(1)	1,2	98	Cf	Californium	[251]	4
19	K	Potassium	39.0983(1)		6	C	Carbon	12.011	6
20	Ca	Calcium	40.078(4)		58	Ce	Cerium	140.116(1)	1
21	Sc	Scandium	44.955912(6)		17	Cl	Chlorine	35.45	3,6
22	Ti	Titanium	47.867(1)		24	Cr	Chromium	51.9961(6)	
23	V	Vanadium	50.9415(1)		27	Co	Cobalt	58.933195(5)	
24	Cr	Chromium	51.9961(6)		112	Cn	Coppermicium	[285]	4
25	Mn	Manganese	54.938045(5)		29	Cu	Coppermicium	63.546(3)	2
26	Fe	Iron	55.845(2)		96	Cm	Curium	[247]	4
27	Co	Cobalt	58.933195(5)		110	Ds	Darmstadtium	[281]	4
28	Ni	Nickel	58.6934(4)	2	105	Cb	Dubnium	[268]	4
29	Cu	Copper	63.546(3)	2	66	Dy	Dysprosium	162.500(1)	1

List of Element in Atomic Number Order

At NO	Symbol	Name	Atomic WT	Notes
30	Zn	Zinc	65.38(2)	2
31	Ga	Gallium	69.723(1)	
32	Ge	Germanium	72.64(1)	
33	As	Arsenic	74.92160(2)	
34	Se	Selenium	78.96(3)	
35	Br	Bromine	79.904(1)	
36	Kr	Krypton	83.798(2)	1,3
37	Rb	Rubidium	85.4678(3)	1
38	Sr	Strontium	87.62(1)	1,2
39	Y	Yttrium	88.90585(2)	
40	Zr	Zirconium	91.224(2)	1
41	Nb	Niobium	92.90638(2)	
42	Mo	Molybdenum	95.96(2)	1
43	Tc	Technetium	[98]	4
44	Ru	Ruthenium	101.07(2)	1
45	Rh	Rhodium	102.90550(2)	
46	Pd	Palladium	106.42(1)	1
47	Ag	Silver	107.8682(2)	1
48	Cd	Cadmium	112.411(8)	1
49	In	Indium	114.818(3)	
50	Sn	Tin	118.710(7)	1
51	Sb	Antimony	121.760(1)	1
52	Te	Tellurium	127.60(3)	1
53	I	Iodine	126.90447(3)	
54	Xe	Xenon	131.293(6)	1,3
55	Cs	Caesium	132.9054519(2)	
56	Ba	Barium	137.327(7)	
57	La	Lanthanum	138.90547(7)	1
58	Ce	Cerium	140.116(1)	1
59	Pr	Praseodymium	140.90765(2)	
60	Nd	Neodymium	144.242(3)	1
61	Pm	Promethium	[145]	5
62	Sm	Samarium	150.36(2)	1

List of Element in Atomic Number Order

At NO	Symbol	Name	Atomic WT	Notes
99	Es	Einsteinium	[252]	4
68	Er	Erbium	167.259(3)	1
63	Eu	Europium	151.964(1)1	1
100	Fm	Fermium	[257]	4
114	Fl	Flerovium	[289]	4,5
9	F	Flurine	18.9984032(5)	
87	Fr	Francium	[223]	4
64	Gd	Gadolinium	157.25(3)	1
31	Ga	Gallium	69.723(1)	
32	Ge	Germanium	72.64(1)	
79	Au	Gold	196.966569(4)	
72	Hf	Hafnium	178.49(2)	
108	Hs	Hassium	[277]	4
2	He	Helium	4.002602(2)	1,2
67	Ho	Holmium	164.93032(2)	
1	H	Hydrogen	1.008	3,6
49	In	Indium	114.818(3)	
53	I	Iodine	126.90447(3)	
77	Ir	Iridium	192.217(3)	
26	Fe	Iron	55.845(3)	
36	Kr	Krypton	83.798(2)	1,3
57	La	Lanthanum	138.90547(7)	1
103	Lr	Lawrencium	[262]	4
82	Pb	Lead	207.2(1)	1,2
3	Li	Lithium	6.94	3,6
116	Lv	Livermorium	[293]	4,5
71	Lu	Lutetium	174.9668(1)	1
12	Mg	Magnesium	24.3050(6)	
25	Mn	Manganese	54.938045(5)	
109	Mt	Meitnerium	[276]	4
101	Md	Mendelevium	[258]	4
80	Hg	Mercury	200.59(2)	
42	Mo	Molybdenum	95.96(2)	1

List of Element in Atomic Number Order				
At NO	Symbol	Name	Atomic WT	Notes
63	Eu	Europium	151.964(1)	1
64	Gd	Gadolinium	157.25(3)	1
65	Tb	Terbium	158.92535(2)	
66	Dy	Dysprosium	162.500(1)	1
67	Ho	Holmium	164.93032(2)	
68	Er	Erbium	167.259(3)	1
69	Tm	Thulium	168.93421(2)	
70	Yb	Ytterbium	173.054(5)	1
71	Lu	Lutetium	174.9668(1)	1
72	Hf	Hafnium	178.49(2)	
73	Ta	Tantalum	180.94788(2)	
74	W	Tungsten	183.84(1)	
75	Re	Rhenium	186.207(1)	
76	Os	Osmium	190.23(3)	1
77	Ir	Iridium	192.217(3)	
78	Pt	Platinum	195.084(9)	
79	Au	Gold	196.966569(4)	
80	Hg	Mercury	200.59(2)	
81	Tl	Thallium	204.38	6
82	Pb	Lead	207.2(1)	1,2
83	Bi	Bismuth	208.9804(1)	
84	Po	Polonium	[209]	4
85	At	Astatine	[210]	4
86	Rn	Radon	[222]	4
87	Fr	Francium	[223]	4
88	Ra	Radium	[226]	4
89	Ac	Actinium	[227]	4
90	Th	Thorium	232.03806(2)	1,4
91	Pa	Protactinium	231.03588(2)	4
92	U	Uranium	237.02891(3)	1,3,4
93	Np	Neptunium	[237]	4

List of Element in Atomic Number Order				
At NO	Symbol	Name	Atomic WT	Notes
60	Nd	Neodymium	144.242(3)	1
10	Ne	Neon	20.1767(6)	1,3
93	Np	Neptunium	[237]	4
28	Ni	Nickel	58.6934(4)	
41	Nb	Niobium	92.90637(2)	
7	N	Nitrogen	14.007	6
102	No	Nobelium	[259]	4
76	Os	Osmium	190.23(3)	1
8	O	Oxygen	15.999	6
46	Pd	Palladium	106.42(1)	1
15	P	Phosphorus	30.973762(2)	
78	Pt	Platinum	195.084(9)	
94	Pu	Plutonium	[244]	4
84	Po	Polonium	[209]	4
19	K	Potassium	39.0983(1)	1
59	Pr	Praseodymium	140.90765(2)	
61	Pm	Promethium	[145]	4
91	Pa	Protactinium	231.03588(2)	4
88	Ra	Radium	[226]	4
86	Rn	Radon	[222]	4
75	Re	Rhenium	186.207(1)	
45	Rh	Rhodium	102.9055(2)	
111	Rg	Roentgenium	[280]	4
37	Rb	Rubidium	85.4678(3)	1
44	Ru	Ruthenium	101.07(2)	1
104	Rf	Rutherfordium	[265]	4
62	Sm	Samarium	150.36(2)	1
21	Sc	Scandium	44.955912(6)	
106	Sg	Seaborgium	[271]	4
34	Se	Selenium	78.96(3)	
14	Si	Silicon	28.085	6

List of Element in Atomic Number Order					List of Element in Atomic Number Order				
At NO	Symbol	Name	Atomic WT	Notes	At NO	Symbol	Name	Atomic WT	Notes
94	Pu	Plutonium	[244]	4	47	Ag	Silver	107.8682(2)	1
95	Am	Americium	[243]	4	1	Na	Sodium	22.98976928(2)	
96	Cm	Curium	[247]	4	38	Sr	Strontium	87.62(1)	1,2
97	Bk	Berkelium	[247]	4	16	Sr	Sulfur	32.06	6
98	Cf	Californium	[251]	4	73	Ta	Tantalum	180.94788(2)	
99	Es	Einsteinium	[252]	4	43	Tc	Technetium	[98]	4
100	Fm	Fermium	[25]	4	52	Te	Tellurium	127.60(3)	1
101	Md	Mendelevium	[258]	4	65	Tb	Terbium	158.92535(2)	
102	No	Nobelium	[259]	4	81	Tl	Thallium	204.38	6
103	Lr	Lawrencium	[262]	4	90	Th	Thorium	232.03806(2)	1,4
104	Rf	Rutherfordium	[265]	4	69	Tm	Thulium	168.93421(2)	
105	Db	Dubnium	[268]	4	50	Sn	Tin	118.710(7)	
106	Sg	Seaborgium	[271]	4	22	Ti	Titanium	47.867(1)	
107	Bh	Bohrium	[270]	4	74	W	Tungsten	183.84(1)	
108	Hs	Hassium	[277]	4	118	Uun	Ununoctium	[294]	4,5
109	Mt	Meitnerium	[276]	4	115	Uup	Ununpentium	[288]	4,5
110	Ds	Darmstadtium	[281]	4	117	Uus	Ununseptium	[294]	4,5
111	Rg	Roentgenium	[280]	4	113	Uut	Ununtrium	[284]	4,5
112	Cn	Copernicium	[285]	4	92	U	Uranium	238.02891(3)	1,3,4
113	Uut	Ununtrium	[284]	4,5	23	V	Vanadium	50.9415(1)	
114	Fl	Flerovium	[289]	4,5	54	Xe	Xenon	131.293(6)	1,3
115	Uup	Ununpentium	[288]	4,5	70	Yb	Ytterbium	173.054(5)	1
116	Lv	Livermorium	[293]	4,5	39	Y	Yttrium	88.90585(2)	
117	Uus	Ununseptium	[294]	4,5	30	Zn	Zinc	65.38(2)	2
118	Uuo	Ununoctium	[294]	4,5	40	Zr	Zirconium	91.224(2)	1

1. Geological specimens are known in which the element has an isotopic composition outside the limits for normal material. The difference between the atomic weight of the element in such specimens and that given in the Table may exceed the stated uncertainty
2. Range in isotopic composition of normal terrestrial material prevents a more precise value being given; the tabulated value should be applicable to any normal material
3. Modified isotopic compositions may be found in commercially available material because it has been subject to an undisclosed or inadvertent isotopic fractionation. Substantial deviation in atomic weight of the element from that given in the Table can occur.
4. Element has no stable nuclides. The value enclosed in brackets, e.g. [209], indicates the mass number of the longest-lived isotope of the element. However three such element (Th, Pa and U) do have a characteristic terrestrial isotopic composition, and for these an atomic weight is tabulated.
5. The names and symbols for element 113-118 are under review. The temporary system recommended by J. Chatt, *Pure Appl. Chem.*, 51, 381-384(1979) is used above.
6. See below table for details of range and original paper for the atomic weight of the element from different sources.

List of Element with Range of Atomic Weights

At No	Symbol	Name	Minimum Atomic Wt	Maximum Atomic Wt
1	H	Hydrogen	1.007 84	1.008 11
3	Li	Lithium	6.938	6.997
5	B	Boron	10.806	10.821
6	C	Carbon	12.0096	12.0116
7	N	Nitrogen	14.006 43	14.007 28
8	O	Oxygen	15.99 03	15.999 77
14	Si	Silicon	28.084	28.086
16	S	Sulfur	32.059	32.076
17	Cl	Chlorine	35.446	35.457
81	Tl	Thallium	204.382	204.385

Source: INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY <http://www.chem.qmul.ac.uk/iupac/>

Remark: RCI Labscan Limited believes all information contained within this catalogue is reliable and accurate. RCI Labscan makes no warranty express or implied, with respect thereto and expressly disclaims all liability for any reliance thereon.





## SYNONYM

Product name	synonym
1, 2-DICHLOROETHANE	1, 2-Bichloroethane, Dichloro-1, 2-ethane, Ethane dichloride, Ethylene chloride, Ethylene dichloride, 1, 2-Ethylene dichloride, Glycol dichloride
1, 4-DIOXAN	1, 4-Dioxane, Glycoethylether, 1, 4-Diethylene dioxide, 1, 4-Dioxacyclohexane, Diethylene dioxide, Diethylene dioxide, Di(ethylene oxide), Dioxan, Dioxane, Dioxane-1, 4, Dioxan-1, 4, p-Dioxan, Tetrahydro-p-dioxin, Tetrahydro-1, 4-dioxin, Dioxyethylene ether, Glycol ethylene ether, Diethylene ether
1-CHLOROBUTANE	Butyl chloride, n-Butyl chloride, 1-Butyl chloride, n-Propylcarbiny chloride
2, 2, 4-TRIMETHYLPENTANE	iso-Octane, Isooctane, Isobutyltrimethylpentane
2-METHYLBUTANE	Ethylidimethylmethane, Isoamylhydride, Isopentane, iso-Pentane,
ACETIC ACID	Acetic acid, Ethanoic acid, Ethylic acid, Methane carboxylic acid, Vinegar acid
ACETONE	2-Propanone, Dimethyl Ketone, keto-propane, pyroacetic ether
ACETONITRILE	Methyl Cyanide, cyanomethane, ethanenitrile
AMMONIUM CHLORIDE	Salt ammoniac
AMMONIUM FERROUS(II) SULFATE HEXAHYDRATE	Ammonium ferrous sulfate, Ferrous ammonium sulfate, Mohr's salt, Iron(II) ammonium sulfate, Ammonium iron(II) sulfate
AMMONIUM MOLYBDATE TETRAHYDRATE	Ammonium heptamolybdate tetrahydrate, Hexammonium heptamolybdate 4-hydrate.
AMMONIUM PERSULPHATE	Ammonium peroxidisulphate, Peroxidisulfuric acid diammonium salt
AMMONIUM SULFATE	Ammonium sulphate, Diammonium sulfate, Diammonium sulphate, Sulfuric acid diammonium salt
ASCORBIC ACID	
BORAX	Boraxdecahydrate, Sodium tetraborate decahydrate, di-Sodium tetraborate decahydrate, Sodium boratedecahydrate
BORIC ACID	Orthoboric acid
BROMOCRESOL GREEN	3, 3', 5, 5'-Tetrabromo-m-cresolsulfonphthalein, BCG
BUTAN-1-OL	n-Butanol, 1-Butanol, Butanol, n-Butan-1-ol, n-Butyl alcohol, 1-Butyl alcohol
CALCIUM HYDROXIDE	Calcium dihydroxide, Calcium hydrate, Hydrated lime, Milk of lime, Slaked Lime
CHLOROBENZENE	Benzene chloride, Monochlorobenzene, phenyl chloride
CHLOROFORM	Formyl trichloride, Methane trichloride, Methenyl trichloride
Cyclohexane	Hexahydrobenzene, Hexamethylene, Naphthene
CYCLOHEXANONE	Pimelic ketone, Cyclohexyl ketone, Keto-hexamethylene.
CYCLOPENTANE	Pentamethylene
DICHLOROMETHANE	Methanedichloride, Methylene bichloride, Methylene chloride, Methylene dichloride
DIETHYL ETHER	Ethyl ether, Ethyl oxide, Ether, Ethoxyethane
DIETHYLAMINE	Diethamine, N,N-Diethylamine, N-ethylethanamine
DIMETHYLACETAMIDE	Acetic acid dimethylamide, N, N-Dimethylacetamide, Dimethylacetone amide, Dimethylamide acetate

Product name	synonym
DIMETHYLFORMAMIDE	Formic acid dimethylamide, N, N-Dimethylformamide, N,N-Dimethylmethanamide, N-Formyldimethylamine, DMF
DIMETHYLSULPHOXIDE	Dimethylsulfoxide, sulfinylbis-Methane, Methylsulfinylmethane, DMSO
di-SODIUM HYDROGEN PHOSPHATE	Sodium monohydrogen phosphate, Disodium hydrogen phosphate, Sodium phosphate dibasic
ERIOCHROME BLACK T	Chrome black T, 2-Hydroxy-1-(1-hydroxy-2-naphthylazo)-6-nitronaphthalene -4-sulfonic acid sodium salt, EBT
ETHANOL	N, N-diethyl-N-[2-(2,6-dimethylphenylamino)-2-oxoethyl]-Benzylammonium benzoate
ETHYL ACETATE	Acetic acid ethyl ester, acetic ether, vinegar naphtha.
ETHYLENEDIAMINE TETRAACETIC ACID DISODIUM SALT	Disodium dihydrogen ethylenediaminetetraacetate dihydrate , EDTA Disodium salt dihydrate
FORMALDEHYDE	Formaline solution, Methanal solution, Methylaldehyde solution, Oxomethane, Oxymethylene, Methylene oxide, formic aldehyde
GLYCINE	Aminoacetic acid, Glycocoll, Soerensen's buffer substances
HYDROCHLORIC ACID	Chlorohydric acid, Hydrogen chloride, Muriatic acid, Spirits of salt
IODINE (RESUBLIMED)	Iodine
MAGNESIUM OXIDE	Calcined magnesite, Magnesia
MAGNESIUM SULFATE	Magnesium sulphate, magnesium sulphate heptahydrate, bitter salt, Epsom salt
METHANOL	Methyl alcohol, carbinol, wood alcohol
METHYL ETHYL KETONE	2-Butanone, Ethyl methyl ketone, Methyl acetone, MEK
METHYL ISOBUTYL KETONE	4-methylpentan-2-one, isobutyl methyl ketone
METHYL ORANGE	4-Dimethylaminoazobenzene-4
METHYL RED	2-(4 - Dimethylaminophenylazo) benzoic acid
METHYLCYCLOHEXANE	Cyclohexylmethane, Hexahydrotoluene, Toluene hexahydride, Hexahydrotoluene
METHYL-t-BUTYL ETHER	tert-Butyl methyl ether, 1, 1-Dimethylethyl methyl ether, 2-Methoxy-2-methylpropane, Methyl-1,1-dimethylethyl ether, tert-Butoxymethane, 2-methoxy-2-methylpropane, MtBE, 2-Methyl butane-2-ol.
n-BUTYL ACETATE	Acetic acid n-butyl ester, Acetic acid butyl ester, Butyl acetate, 1- Butyl acetate
n-HEPTANE	1-Methyl hexane, n-Dipropylmethane, Heptyl hydride
NITRIC ACID	Nitrous fumes, Red fuming nitric acid.
n-METHYL-2-PYRROLIDONE	1-Methyl-2-pyrrolidone, nMP
n-NONANE	Nonane, 2-Isopropyl-4-methyl-6-hydropyrimidine
n-OCTANE	Octane
n-PENTANE	Amyl hydride, n- Amyl hydride, pentane, Diethyl methane, 1, 3-Dimethyl propane
ortho-PHOSPHORIC ACID	Phosphoric acid, White phosphoric acid, Sonac
PETROLEUM ETHER	Petroleum benzine, Petroleum spirit
PHENOLPHTHALEIN	3, 3-Bis(4-hydroxyphenyl)-1(3H)-isobenzofuranone, 3,3-Bis (p-hydroxyphenyl)phthalide

Product name	synonym
POTASSIUM DIHYDROGEN ORTHOPHOSPHATE	Potassium dihydrogen phosphate, Potassium phosphate, mono-Potassium Phosphate, mono-Potassium ortho Phosphate, Potassium biphosphate, Potassium phosphate monobasic
POTASSIUM HYDROXIDE	Potash caustic
POTASSIUM SODIUM (+) TARTRATE TETRAHYDRATE	Sodium potassium tartrate, Tartaric acid potassium sodium salt, Potassium sodium tartrate tetrahydrate
PROPAN-1-OL	1-Propanol, n-Propyl alcohol, 1-Hydroxy propane, Ethyl carbinol, n-Propanol
PROPAN-2-OL	iso-Propanol, isopropyl alcohol, Dimethyl carbinol, 2-Propanol
SODIUM CHLORIDE	Common salt, Rock salt, Sea salt, White crystal
SODIUM HYDROGEN CARBONATE	Sodium bicarbonate
SODIUM HYDROXIDE	Sodium bicarbonate
SODIUM NITRATE	Chile saltpeter, Nitric acid sodium salt
SODIUM NITRITE	Diazotizing salts, Nitrous acid sodium salt
SODIUM SULFATE	Sodium Sulphate Anhydrous
SODIUM THIOSULFATE PENTAHYDRATE	Antichlor, Sodium thisulfate pentahydrate
STANNOUS(II) CHLORIDE DIHYDRATE	Tin(II) chloride dehydrate, Hydrochloric acid tin(II)-salt dehydrate, Stannic chloride, Stanno chlor
SUCROSE	Cane sugar, Saccharose
SULFURIC ACID	Battery acid, Dihydrogen sulfate, Dipping acid, Electrolyte acid, Mattling acid, Sulphuric acid.
TETRACHLOROETHYLENE	Carbon bichloride, Carbon dichloride, Ethylene tetrachloride, Perchlorethylene
TETRAHYDROFURAN	Cyclotetramethylene oxide, Diethylene oxide, 1, 4-Epoxybutane, Oxacyclopentane, Oxolane, Tetramethylene oxide
TOLUENE	Methylbenzene
TRICHLOROACETIC ACID	Trichloroethanoic Acid, TCA
TRICHLOROETHYLENE	Acetylene trichloride, 1-Chloro-2, 2-dichloroethylene, 1, 1-Dichloro-2-chloroethylene, Ethylene trichloride, 1, 1, 2-Trichloroethylene, 1, 2, 2-Trichloroethylene
tri-SODIUM CITRATE DIHYDRATE	Citric acid trisodium salt dihydrate, Sodium citrate tribasic dihydrate
UREA	Carbamide, Carbonyldiamide
WATER	Dihydrogen oxide, Distilled water
XYLENE	Dimethylbenzene, Methyl toluene
ZINC SULFATE HEPTAHYDRATE	Zinc vitriol

## RCI LABSCAN CHEMICAL PROPERTIES

Product name	CAS-No	Molecular Weight (g/mol)	Density (at20°C)	Boiling Point (°C)	Melting Point (°C)	Flash Point (°C)
ACETIC ACID 50%	64-19-7	60.05	1.07	105	17	39
ACETIC ACID 60%	64-19-7	60.05	1.07	117-118	-	-
ACETIC ACID 96%	64-19-7	60.05	1.06	118	10	39
ACETIC ACID GLACIAL	64-19-7	60.05	1.05	118	17	39
ACETONE	67-64-1	58.08	0.79	56.2	-95.4	-20
ACETONITRILE	75-05-8	41.05	0.786	81.6	-45.7	2
AMMONIUM ACETATE	631-61-8	77.08	1.17	-	114	-
AMMONIUM CHLORIDE	64-19-7	53.49	1.52	-	335	-
AMMONIUM FERROUS (II) SULFATE HEXAHYDRATE	7783-85-9	392.14	1.86	-	100	-
AMMONIUM MOLYBDATE TETRAHYDRATE	12054-85-2	1235.86	2.498	-	90	-
AMMONIUM PERSULPHATE	7727-54-0	228.19	1.98	-	120	-
AMMONIUM SULFATE	7783-20-2	132.14	1.77	-	-	-
ASCORBIC ACID	50-81-7	176.12	1.65	-	190	-
BORAX	1303-96-4	381.37	1.72	-	75	-
BORIC ACID	10043-35-3	61.83	1.44	-	185	-
BROMOCRESOL GREEN ,INDICATOR	76-60-8	698.02	-	-	217-218	-
BUTAN-1-OL	71-36-3	74.12	0.81	117	-89.5	34
BUTYL ACETATE (n-BUTYL ACETATE)	123-86-4	116.16	0.88	126	-76	22
CALCIUM CHLORIDE DIHYDRATE	10035-04-8	147.01	1.85	-	176	-
CALCIUM HYDROXIDE	1305-62-0	74.09	2.24	-	550	-
CHLOROBENZENE	108-90-7	112.26	1.11	132	-45	28
CHLOROBUTANE, 1-CHLOROBUTANE	109-69-3	92.58	0.886	78.4	-123	-17
CHLOROFORM	67-66-3	119.38	1.479	61	-63	-
CITRIC ACID MONOHYDRATE	5949-29-1	210.14	1.54	-	135-152	-
CLEANING SOLUTION S	7664-93-9	98.08	1.84	-	-	-
CYCLOHEXANE	110-82-7	84.16	0.779	81	6	-18
CYCLOHEXANONE	108-94-1	98.14	0.945	156.6	-31	43
CYCLOPENTANE 95%	287-92-3	70.14	0.749	49	-93	-42
CYCLOPENTANE 99%	287-92-3	70.14	0.749	49	-93	-42
DICHLOROETHANE, 1, 2-DICHLOROETHANE	107-06-2	98.96	1.25	83.5	-35	13
DICHLOROMETHANE	75-09-2	84.93	1.33	40	-95	-
DIETHYL ETHER	60-29-7	74.12	0.71	34.6	-116.3	-40
DIETHYLAMINE	109-89-7	73.14	0.71	56	-50	-23
DIMETHYLACETAMIDE	127-19-5	87.12	0.94	-20	166	70
DIMETHYLFORMAMIDE	68-12-2	73.1	0.949	153	-61	58
DIMETHYLSULPHOXIDE	67-68-5	78.13	1.1	189	18.5	95
DIOXAN, 1, 4 -DIOXAN	123-91-1	88.11	1.03	101.5	12	11
ERIOCHROME BLACK T	1787-61-7	461.38	-	-	-	-
ETHANOL 50%	64-17-5	46.07	0.93	-	-	-
ETHANOL	64-17-5	46.07	0.79	78.3	-114.5	12
ETHYL ACETATE	141-78-6	88.11	0.9	77	-83	-4
ETHYLENEDIAMINE TETRAACETIC ACID DISODIUM SALT	6381-92-6	372.24	-	-	252	-
FORMALDEHYDE (35%-40%)	50-00-0	30.03	1.09	93-96	<-15	>62

Product name	CAS-No	Molecular Weight (g/mol)	Density (at20°C)	Boiling Point (°C)	Melting Point (°C)	Flash Point (°C)
GLYCINE, AR	56-40-6	75.07	1.595	-	232-236	-
HEPTANE, n-HEPTANE (95%~99%)	142-82-5	100.21	0.68	97-98	-90.5	-4
HEPTANE FRACTION,LC	142-82-5	100.21	0.68-0.69	97-98	-90.5	-4
HEXANE, n-HEXANE (95%~99%)	110-54-3	86.18	0.66	69	-94.3	-22
HEXANE FRACTION	110-54-3	86.18	0.66	67-69	-94.3	-22
HYDROCHLORIC ACID (0.1N~4.0N)	7647-01-0	-	-	-	-	-
HYDROCHLORIC ACID 3%	7647-01-0	36.46	1.02	-	-	-
HYDROCHLORIC ACID 4%	7647-01-0	36.46	1.02	-	-	-
HYDROCHLORIC ACID 5%	7647-01-0	36.46	1.03	-	-	-
HYDROCHLORIC ACID 7.5%	7647-01-0	36.46	1.04	-	-	-
HYDROCHLORIC ACID 9%	7647-01-0	36.46	1.04	-	-	-
HYDROCHLORIC ACID 10%	7647-01-0	36.46	1.05	102	-15	-
HYDROCHLORIC ACID 18%	7647-01-0	36.46	1.09	108	-59	-
HYDROCHLORIC ACID 20%	7647-01-0	36.46	1.09	108	-59	-
HYDROCHLORIC ACID 25%	7647-01-0	36.46	1.12	107	-55	-
HYDROCHLORIC ACID 30%	7647-01-0	36.46	1.15	90	-50	-
HYDROCHLORIC ACID 32%	7647-01-0	36.46	1.16	85	-40	-
HYDROCHLORIC ACID 35%	7647-01-0	36.46	1.17	61	-30	-
HYDROCHLORIC ACID 36%	7647-01-0	36.46	1.18	61	-30	-
HYDROCHLORIC ACID 37%	7647-01-0	36.46	1.19	51	-30	-
HYDROGEN PEROXIDE SOLUTION 50%	7722-84-1	34.01	1.19	14	-52	-
IODINE (RESUBLIMED)	7553-56-2	253.81	4.93	185	114	-
MAGNESIUM CHLORIDE HEXAHYDRATE	7791-18-6	203.3	1.57	1412	117	-
MAGNESIUM OXIDE	1309-48-4	40.3	3.58	3600	2800	-
MAGNESIUM SULFATE ANHYDROUS	7487-88-9	120.37	2.66	-	1124	-
MAGNESIUM SULFATE HEPTAHYDRATE	10034-99-8	246.48	1.68	-	1124	-
METHANOL	67-56-1	32.04	0.79	64.5	-98	11
METHYL ETHYL KETONE	78-93-3	72.11	0.805	79.6	-86	-4
METHYL ISOBUTYL KETONE	108-10-1	100.16	0.8	116-118	-84	14
METHYL ORANGE,INDICATOR	547-58-0	327.34	-	-	> 300	-
METHYL RED,INDICATOR	493-52-7	269.31	-	-	181-182	-
METHYL-2-PYRROLIDONE , n-METHYL-2-PYRROLIDONE	872-50-4	99.13	1.03	202	-24	91
METHYLBUTANE 95%~99%	78-78-4	72.15	0.619	27.9	-160	-57
METHYLCYCLOHEXANE	108-87-2	98.19	0.769	100.9	-126	-4
METHYL-t-BUTYL ETHER	1634-04-4	88.15	0.74	55.3	-108.6	-28
NITRIC ACID 10%	7697-37-2	63.01	1.05	102	-6.4	-
NITRIC ACID 30%	7697-37-2	63.01	1.18	107.2	-36.3	-
NITRIC ACID 5%	7697-37-2	63.01	1.03	101	-2.7	-
NITRIC ACID 50%	7697-37-2	63.01	1.31	114.7	-19.2	-
NITRIC ACID 65%	7697-37-2	63.01	1.39	119.6	-29.1	-
NITRIC ACID 70%	7697-37-2	63.01	1.41	119.9	-41	-
NITRIC ACID 90% Fuming	7697-37-2	63.01	1.48	96.2	-65.2	-
NITRIC ACID 95% Fuming	7697-37-2	63.01	1.49	87.1	-49.5	-
NITRIC ACID 97% Fuming	7697-37-2	63.01	1.49	85.2	-45.3	-
NITRIC ACID 98% Fuming	7697-37-2	63.01	1.5	84.4	-43.6	-

Product name	CAS-No	Molecular Weight (g/mol)	Density (at20°C)	Boiling Point (°C)	Melting Point (°C)	Flash Point (°C)
NONANE, n-NONANE 95%	111-84-2	128.26	0.72	151	-53	31
NONANE, n-NONANE 99%	111-84-2	128.26	0.72	151	-53	31
OCTANE, n-OCTANE 95%	111-65-9	114.23	0.703	125.7	-57	13
OCTANE, n-OCTANE 99%	111-65-9	114.23	0.703	125.7	-57	13
PENTANE, n-PENTANE 95%	109-66-0	72.15	0.63	36.1	-129.7	-48
PENTANE, n-PENTANE 99%	109-66-0	72.15	0.63	36.1	-129.7	-48
PETROLEUM ETHER 40-60	64742-49-0	-	0.645-0.665	40-0	-	< -21
PETROLEUM ETHER 60-80	64742-49-0	-	0.68	60-80	-	< -20
PHENOLPHTHALEIN, INDICATOR	77-09-8	318.32	1.3	> 450	258-261	-
PHOSPHORIC ACID, ortho-PHOSPHORIC ACID 85%	7664-38-2	98	1.71	158	21	-
POTASSIUM DIHYDROGEN ORTHOPHOSPHATE ANHYDROUS	7778-77-0	136.09	2.34	-	253	-
POTASSIUM HYDROXIDE 0.1 N	1310-58-3					
POTASSIUM HYDROXIDE 85%	1310-58-3	56.11	2.04	1320	360	-
POTASSIUM HYDROXIDE SOLUTION 30%	1310-58-3	56.11	1.28	-	-	-
POTASSIUM HYDROXIDE SOLUTION 11%	1310-58-3	56.11	1.1	-	-	-
POTASSIUM IODATE	7758-05-6	214	3.98	-	560	-
POTASSIUM IODIDE	7681-11-0	166.01	3.13	1325	681	-
POTASSIUM SODIUM (+) TARTRATE TETRAHYDRATE	6381-59-5	282.23	-	-	-	-
POTASSIUM SULFATE	7778-80-5	174.26	2.66	1689	1067	-
PROPAN-1-OL	71-23-8	60.1	0.804	97	-127	15
PROPAN-2-OL 80%	67-63-0	60.1	0.848	82.4	-89.5	~18
PROPAN-2-OL	67-63-0	60.1	0.786	82.4	-89.5	12
SILVER NITRATE,AR	7761-88-8	169.87	4.35	444	212	-
SODIUM ACETATE TRIHYDRATE	6131-90-4	136.08	1.42	> 400	58	>250
SODIUM CHLORIDE 99%~99.9%	7647-14-5	58.44	2.17	1461	801	-
SODIUM HYDROGEN CARBONATE	144-55-8	84.01	2.2	-	270	-
SODIUM HYDROGEN PHOSPHATE ANHYDROUS, di-SODIUM HYDROGEN PHOSPHATE ANHYDROUS	7558-79-4	141.96	-	-	250	-
SODIUM HYDROGEN PHOSPHATE ANHYDROUS, di-SODIUM HYDROGEN PHOSPHATE DIHYDRATE	10028-24-7	177.99	2.1	-	92.5	-
SODIUM HYDROXIDE (MICROPEARLS)	1310-73-2	40	2.13	1390	323	-
SODIUM HYDROXIDE 0.1~1.0N	1310-73-2	-	-	-	-	-
SODIUM HYDROXIDE 97%~99%	1310-73-2	40	2.13	1390	323	-
SODIUM HYDROXIDE SOLUTION 25%	1310-73-2	40	1.28	-	-	-
SODIUM HYDROXIDE SOLUTION 30%	1310-73-2	40	1.33	-	-	-
SODIUM HYDROXIDE SOLUTION 35%	1310-73-2	40	1.38	-	-	-
SODIUM HYDROXIDE SOLUTION 48%	1310-73-2	40	1.53	-	-	-
SODIUM NITRATE	7631-99-4	69	2.132	280	-	-
SODIUM NITRITE	7632-00-0	84.99	2.26	-	308	-
SODIUM SULFATE ANHYDROUS	7757-82-6	142.04	2.7	-	888	-
SODIUM THIOSULFATE 0.1 N	10102-17-7					

Product name	CAS-No	Molecular Weight (g/mol)	Density (at20°C)	Boiling Point (°C)	Melting Point (°C)	Flash Point (°C)
SODIUM THIOSULFATE PENTAHYDRATE	10102-17-7	248.21	1.74	-	48	-
STANNOUS(II) CHLORIDE DIHYDRATE	10025-69-1	225.63	2.71	623	38	-
SUCROSE, AR	57-50-1	342.3	-	-	169-170	-
SULFURIC ACID 0.1-1.0 N	7664-93-9	-	-	-	-	-
SULFURIC ACID 50%	7664-93-9	98.08	1.39	123.3	36.5	-
SULFURIC ACID 60%	7664-93-9	98.08	1.49	140	-28.7	-
SULFURIC ACID 81%	7664-93-9	98.08	1.74	210	2.5	-
SULFURIC ACID 89%	7664-93-9	98.08	1.81	256	-1.5	-
SULFURIC ACID 96%	7664-93-9	98.08	1.84	310	-11.1	-
SULFURIC ACID 98%	7664-93-9	98.08	1.84	330	1.5	-
TETRACHLOROETHYLENE	127-18-4	165.83	1.62	121	-22	-
TETRAHYDROFURAN	109-99-9	72.11	0.89	65-66	-108.5	21.5
TOLUENE	108-88-3	92.14	0.87	110.6	-95	4
TRICHLOROACETIC ACID	76-03-9	163.38	1.63	54-56	197	> 110
TRICHLOROETHYLENE	79-01-6	131.79	1.46	87	-86	-
TRIMETHYLPENTANE, PC (2, 2, 4 – TRIMETHYLPENTANE)	540-84-1	114.23	0.69	99	-107	-12
tri-SODIUM CITRATE DIHYDRATE	6132-04-3	294.1	1.76	-	150	-
UREA	57-13-6	60.6	1.34	-	133	-
WATER	7732-18-5	18.02	1	100	0	-
WIJS SOLUTION	64-19-7	60.05	1.06	-	-	40
WIJS SOLUTION 0.1 N	64-19-7	60.05	1.06	-	-	40
XYLENE	1330-20-7	106.17	0.86	137-143	7-141	25
ZINC SULFATE HEPTAHYDRATE	7446-20-0	287.54	1.97	-	100	-



## EFFECT OF CHEMICALS ON PLASTICS

Chemicals can affect the strength, flexibility, surface appearance, color, dimensions or weight of plastic. The basic modes of interaction which these changes are:

- (1) chemical attack on the polymer chain, with resultant reduction in physical properties, including oxidation; reaction of functional groups in or on the chain, and depolymerization;
- (2) physical change, including absorption of solvents, resulting in softening and swelling of the plastic permeation of solvent through the plastic, and dissolution in a solvent,
- (3) stress-crackin from the interaction of a “stress-cracking agent” with molded-in or external stresses. Also see “Chemical Resistance Classification”.

The reactive combination of compounds of two or more classes may cause a synergistic or undesirable chemical effect. Other factors affecting chemical resistance include temperature, pressure and internal or external stresses (e.g. centrifugation), length of exposure and concentration of the chemical. As temperature increases, resistance to attack decreases.

### Resin Codes:

ECTFE	Halar ECTFE** (ethylene-chlorotrifluoroethylene copolymer)
ETFE	Tefzel ETFE* (ethylene-tetrafluoroethylene)
FEP	TeFlon* (Fluorinated ethylene propylene)
HDPE	high-density polyethylene
LDPE	low-density polyethylene
PC	polycarbonate
PETG	polyethylene terephthalate copolymer
PFA	Twflon PFA* (perfluoroalkoxy)
PMP	polymethylpentene
PP	polypropylene
PPCO*	polypropylene copolymer
PS	polystyrene
PSF	polysulfone
PVC	polyvinyl chloride
PVDF	polyvinylidene fluoride
TEE	Teflon TFE* (tetrafluoroethylene)
TMX	Thermanox
PMX	Permanox

\*PPCO has replaced polyallomer (PA) in all products.

First letter of each pair applies to conditions at 20°C; the second to those at 50°C. At 20°C->EG <-at50°C



CHEMICAL	LDPE	HDPE	PP	PPCO	PMP	PETG	FEP	TFE	PEA	ECTFE	ETFE	PC	RIGID PVC	FLEX. PVC	PSF	PS	PVDF	TMX	PMX
ACTIC ACID 95%	EG	EE	EG	EG	EG	NN	EE	EE	EE	EE	EE	NN	EG	NN	FN	NN	EG	EN	EG
ACETONE	NN	NN	GG	GG	EE	NN	EE	EE	EE	GF	GF	NN	NN	NN	NN	NN	NN	EF	EE
ACETONITRILE	EE	EE	FN	FN	FN	-	EE	EE	EE	EE	EE	NN	NN	NN	NN	NN	EE	-	FN
AMMONIUM ACETATE	EE	EE	EE	EE	EE	-	EE	EE	EE	EE	EE	EE	EE	EE	EG	EE	EE	-	EE
AMMONIUM CHLORIDE	EE	EE	EE	EE	EE	-	EE	EE	EE	EE	EE	EG	EE	EE	EE	EE	EE	E-	EE
BORIC ACID	EE	EE	EE	EE	EE	NN	EE	EE	EE	EE	EE	EE	EE	GG	-	EG	EE	-	EE
CYCLOHEXANE	FN	FN	FN	FN	NN	-	EE	EE	EE	EG	EG	NN	GG	NN	NN	NN	EE	-	NN
CYCLOHEXANONE	NN	FN	FN	FN	GF	NN	EE	EE	EE	EE	EE	NN	NN	NN	NN	NN	FN	EF	GF
CYCLOPENTANE	NN	FN	FN	FN	FN	-	EE	EE	EE	EE	EE	NN	FN	NN	NN	NN	EE	-	FN
1,2-DICHLOROETHANE	NN	NN	NN	NN	NN	NN	EE	EE	EE	EE	EE	NN	FN	NN	NN	NN	EE	-	NN
DIETHYL ETHER	NN	FN	NN	NN	NN	-	EE	EE	EE	EG	EG	NN	FN	NN	NN	NN	EG	EN	NN
DIETHYLAMINE	NN	FN	GN	GN	FF	-	EE	EE	EE	EG	EG	NN	NN	NN	GF	GG	NN	-	FF
DIMETHYLACETAMIDE	FN	EE	EE	EE	FG	-	EE	EE	EE	EG	EG	NN	NN	NN	NN	NN	NN	EN	FG
DIMETHYLFORMAMIDE	EE	EE	EE	EE	EE	-	EE	EE	EE	GG	GG	NN	FN	NN	NN	NN	NN	EN	EE
DIMETHYLSULPHOXIDE	EE	EE	EE	EE	EE	NN	EE	EE	EE	EG	EG	NN	NN	NN	NN	EG	NN	EN	EE
1,4-DIOXAN	GF	GG	GF	GF	GF	-	EE	EE	EE	EF	EF	GF	FN	FN	FN	GF	NN	EN	GF
ETHANOL	EG	EE	EG	EG	EG	G-	EE	EE	EE	EE	EE	EG	EE	GF	EG	GF	EE	EN	EG
ETHYL ACETATE	EE	EE	EG	EE	FN	NN	EE	EE	EE	EE	EE	NN	NN	NN	NN	NN	NN	EN	FN
FORMALDEHYDE 40%	EG	EE	EG	EG	EG	-	EE	EE	EE	EE	EE	EG	GF	FN	GF	NN	EE	E-	EG
HYDROCHLORIC ACID 35-37%	EE	EE	EG	EG	EG	-	EE	EE	EE	EE	EE	NN	GF	GN	EE	FF	EE	NN	EG
IODINE (RESUBLIMED)	NN	NN	FN	GN	-	-	EE	EE	EE	EG	EG	NN	NN	NN	NN	NN	EF	-	GN
MAGNESIUM CHLORIDE HEXAHYDRATE	EE	EE	EE	EE	EE	-	EE	EE	EE	EE	EE	EE	EE	GN	EE	EE	EE	E-	EE
METHANOL	EE	EE	EE	EE	EE	G-	EE	EE	EE	EE	EE	GF	EF	FN	GF	FN	EE	EN	EE
METHYL ETHYL KETONE	NN	NN	EG	EG	NN	G-	EE	EE	GF	GF	NN	NN	NN	NN	NN	NN	NN	E-	NN
METHYL ISOBUTYL KETONE	NN	NN	GF	GF	FF	NN	EE	EE	EE	GF	GF	NN	NN	NN	NN	NN	GN	E-	FF
METHYL TERT-BUTYL ETHER	NN	FN	FN	FN	EE	NN	EE	EE	EE	EG	EG	NN	NN	NN	NN	NN	EE	-	EE
n-BUTYL ACETATE	GF	GF	GF	GF	GF	-	EG	EE	EE	EG	NN	NN	NN	NN	NN	NN	GN	G-	GF
n-HEPTANE	FN	GF	FF	FF	FF	-	EE	EE	EE	EE	EE	EG	GF	NN	EG	NN	EE	E-	FF
n-HEXANE 95%	NN	GF	GF	GF	FN	E-	EE	EE	EE	EE	EE	FN	GN	NN	EG	NN	EE	E-	FN
NITRIC ACID 65-70%	FN	GN	NN	NN	FN	NN	EE	EE	EE	EE	EE	NN	FN	NN	NN	NN	GF	NN	FN
n-OCTANE	EE	EE	EE	EE	EE	-	EE	EE	EE	EE	EE	GF	FN	NN	GF	NN	EE	-	EE
ORTHO-PHOSPHORIC ACID 85%	EE	EE	EG	EG	EG	-	EE	EE	EE	EE	EE	EG	EG	GF	EE	EG	EE	NN	EE
SILVER NITRATE	EG	EE	EG	EG	EF	-	EE	EE	EE	EE	EE	EE	EG	EG	EE	GF	EE	GN	EE
SULFURIC ACID 96-98%	GC	GC	FN	FN	GG	NN	EE	EE	EE	EE	EE	NN	GN	NN	NN	NN	EG	NN	GG
TETRAHYDROFURAN	FN	GF	GF	GF	FF	-	EE	EE	EE	GF	GF	NN	NN	NN	NN	NN	FN	-	FF
TOLUENE	FN	FN	FN	GF	FF	FN	EE	EE	EE	EE	EE	FN	NN	NN	NN	NN	EE	GN	FF
TRICHLOROETHYLENE	NN	FN	NN	NN	NN	-	EE	EE	EE	EG	EG	NN	NN	NN	NN	NN	EE	GN	NN
2,2,4-TRIMETHYLPENTANE	FN	FN	FN	FN	FN	-	EE	EE	EE	EG	EG	NN	NN	NN	GF	NN	EE	-	FN
XYLENE	GN	FN	FN	FN	FN	-	EE	EE	EE	EG	NN	NN	NN	NN	NN	NN	EE	GN	FN
ZINC SULFATE (HEPTAHYDRATE)	EE	EE	EE	EE	EE	-	EE	EE	EE	EE	EE	EE	EE	GN	EE	EE	EE	E-	EE

E No damage after 30 days of constant exposure.

F Some effect after 7 days of constant exposure.

G Little or no damage after 30 days of constant exposure.

N Immediate damage may occur. Not recommended for continuous use.

## RCI LABSCAN SALES AND DELIVERY CONDITIONS

### 1. DEFINITIONS

In these Sales and Delivery Conditions

“The Company” means RCI Labscan Limited.

“The Customer” means the person, firm or company who buys or agrees to buy the goods from the company.

“The Goods” means the product or materials which the customer buys from the company.

### 2. GENERAL

a) These terms and conditions shall apply without variation to every contract entered into by the Company for the sale of good unless a variation hereto is expressly agreed in writing by the Company.

b) These terms and conditions shall apply notwithstanding any inconsistency among them or with the terms and conditions set forth in any agreement provided by the Customers.

c) All other terms and conditions not contained herein are expressly excluded unless expressly agreed upon in writing by the Company

### 3. PRICE

a) Unless under exception herein, the price of the Goods shall be the Company's quoted price, which shall bind Company provided that the Customer accepts the Company's quotation with in 7 days.

b) The Company may by giving notice to the Customer at any time up to 7 days before delivery increases the price of goods to reflect any increase in cost incurred by the Company due to factors arising after the making the Sales contract which are beyond the reasonable control of the Company (include or without limitation, foreign exchange fluctuations, taxes and manufacturing costs.) Provided that the Customer may cancel this contract within 7 days after receiving such notice from the Company

c) The price in a) is exclusive of V.A.T. which shall be due at the rate ruling on the date of the Company's invoice.

### 4. DELIVERY

a) Any time or date quoted for delivery of the Goods is Solely an approximation and the Company shall not be liable for any delay in the delivery for whatsoever cause. Time spent for delivery shall not be of essence unless otherwise prior agreed upon by the Company in writing

b) If the Customer causes the delivery of the Goods, in whole or in part, to be delayed, it shall be deemed at the sole risk of the Customer and the Customer is responsible for all incurred expenses

c) If the Company fails to deliver the Goods for any reason, other than cause beyond the Company's reasonable control or due to the Customers' own fault, the Company shall be liable to provide the Customer with similar goods at the cheapest price available on the market.

### 5. PAYMENT

a) The Customer shall pay the Company for the Goods according to the payment terms states in the invoice issue by the Company. Prompt payment is essential.

b) If for any reason whatsoever payment is not made within in due date, the Customer shall be liable to pay interest on such amount at the rate of 2% per annum over the MLR rates announced by Thai Banks prevailing on that period on the Company's Banker from time to time force and shall accrue at such a rate after as well as before any judgment obtained.

c) Failure by the Customer to make any payment hereunder within the due date shall entitle the Company, at its sale option to cancel or suspend any contract without prejudice to any other rights the Company may have against the Customer.

## 6. WARRANTIES AND LIABILITIES

The Company warrants that the Goods at the time of delivery correspond to the description given by the Company provided always that the Company may, from time to time, without notice to the Customer, make alteration to specification of the Goods which are required to comply with any applicable safety or statutory requirements or which do not materially affect the quality of fitness for the purpose of the Goods. Except where the Customer is dealing as a consumer, all other warranties, conditions or terms relating to fitness for purpose, merchant ability on condition of the Goods and whether implied by Statute of Common Law otherwise are hereby excluded.

## 7. CLAIMS

- a) The Customer shall inspect the Goods on delivery and shall within 7 days of delivery notify the Company of all alleged defect, shortage in quantity, damage or failure to comply with the description. The customer shall afford the Company an opportunity to inspect the Goods within 14 days after delivery and before any use is made of them. If the Customer shall fail to comply with these provisions, the Goods shall be conclusively presumed to be in accordance with the Contract and free from any defect or damage which would be apparent on a reasonable examination of Goods and the customer shall be deemed to have accepted the Goods.
- b) The Customer shall notify the Company of failure deliver in whole or in part of the consignment, within 7 days from the date of delivery. Notwithstanding the receipt by the Company of such notice, a clear signature on the carrier delivery advice sheet shall be deemed to signify receipt of the Goods according to the Quantity indicated on the advice sheet.
- c) If the Goods are not in accordance with the Contract for any reason whatsoever, the Customer's sole remedy other than Company making Goods any shortage by replacing such Goods or, is by choosing the option of a refund for the proportional part of the price instead of the replacement
- d) The Company's liability to the Customer, whether for any breach of contract or otherwise, shall not in any event exceed the price of the Goods and the Company shall be under no liability for any direct loss and or expense or indirect loss and / or expense suffered by the Customer or liability to third parties incurred by the Customer.

## 8. CONDITIONS OF PURCHASE

The rights and obligation of the Customer shall not be assigned or transferred without the prior written consent of the Company

## 9. TERMINATION OR SUSPENSION

Without prejudice to any of its rights, the Company may terminate the Contract suspend other delivers to the Customer in the event that the Customer fails to make due payment for any Goods or if any distress execution or legal process shall be levied upon the Customer or the Customer becomes insolvent or being a body incorporate has passed a Resolution for Voluntary winding up or subject to a winding up Order of the Court or a receiver has been appointed.

## 10. PROPERTY AND RISK

- a) The goods shall be at the Customer's sole risk as from delivery. In spite of delivery having being made, ownership of the Goods shall not pass from the Company until:
  - 1) The Buyer shall have paid the price plus V.A.T in full
  - 2) No other sums whatever shall be due from the Customer to Company.
- b) Until ownership of the Goods passes to the Customer in accordance with Clause a) above, the Customer shall hold the Goods and each of them on a fiduciary basis for the company The Customer shall store the Goods free of cost separately from all other Goods in its possession and marked in such a way that they are clearly identified as the company's property.
- c) The Company shall be entitled to recover the price (plus V.A.T.) notwithstanding that the ownership in the Goods has no left the Company.

- d) Until such time which the ownership of the goods passes from the Company, the Customer shall upon request deliver up the goods to the company. If the Customer fails to do so, the Company may enter upon the premises owned controlled or occupied by the Customer where the Goods are repossess the Goods.
- e) The Customer shall not pledge or in any way place as security for indebtedness, any of the Goods which are still the property of the Company. Without prejudice to the other rights of the Company, if the Customer does so all sums whatsoever owing by the Customer to the Company shall forthwith become due and payable
- f) The Customer shall insure and keep insured to cover the total price of the Goods against all risks to reasonably satisfy the Company until the date the ownership in Goods leaves the Company and shall provide the Company with a copy of the policy of Insurance on request. Without prejudice to the other rights of the Company, if the Customer fails to do so all sums whatsoever owned by the Customer to the Company shall forthwith become due and payable.

#### 11. SET OFF AND COUNTERCLAIM

The Customer may not withhold payment of any invoice or other payment due to the Company by reason of any right of set off or counterclaim which the Customer may have or allege to have for any reason whatsoever.

#### 12. MARKING AND PACKING GOODS

The goods shall be marked in accordance with the Customer's instruction and all lawful requirement and properly packed and secured for delivery to the Customer.

#### 13. INTELLECTUAL PROPERTY

The specification of the Goods (including any intellectual property rights in them) shall, as between the parties, be the property of the Company. Where any specification has been supplied by the Customer for manufacture by or to the order of the Company then the Customer warrants that the use of those specification for the manufacturer, processing assembly or supply of the Goods shall not infringe the rights of any third party.

#### 14. SEVERANCE

Any provision of this Contract which is or may be void or unenforceable shall to the extent of such invalidity or unenforceability, be deemed severable and shall not effect any other provision of this Contract.

#### 15. WAIVER

No waiver or forbearance by the Company (whether expressed or implied) in enforcing any of its rights under this Contract shall prejudice its right to do so in the future.

#### 16. FORCE MAJEURE CLAUSE

Either party shall be liable for any default due to any act of God, war, strike, lock-out, industrial, action, fire, flood, draught, tempest or other event beyond the reasonable control of either party.

#### 17. PROPER LAW OR CONTRACT

This contract is subject to the Law of the Kingdom of Thailand in relation to any contract with RCI Labscan Limited

# PERIODIC TABLE OF THE ELEMENTS

1 <b>H</b> Hydrogen 1.008	2 <b>He</b> Helium 4.002602																												
3 <b>Li</b> Lithium 6.94	4 <b>Be</b> Beryllium 9.012182	5 <b>B</b> Boron 10.81	6 <b>C</b> Carbon 12.011	7 <b>N</b> Nitrogen 14.007	8 <b>O</b> Oxygen 15.999	9 <b>F</b> Fluorine 18.998403163	10 <b>Ne</b> Neon 20.1797									17 <b>Cl</b> Chlorine 35.45	18 <b>Ar</b> Argon 39.948												
11 <b>Na</b> Sodium 22.98976928	12 <b>Mg</b> Magnesium 24.305	13 <b>Al</b> Aluminium 26.9815385	14 <b>Si</b> Silicon 28.085	15 <b>P</b> Phosphorus 30.973761998	16 <b>S</b> Sulfur 32.06	35 <b>Br</b> Bromine 79.904	36 <b>Kr</b> Krypton 83.798									53 <b>I</b> Iodine 126.90447	54 <b>Xe</b> Xenon 131.293												
19 <b>K</b> Potassium 39.0983	20 <b>Ca</b> Calcium 40.078	39 <b>Y</b> Yttrium 88.90585	37 <b>Rb</b> Rubidium 85.4678	38 <b>Sr</b> Strontium 87.62	55 <b>Cs</b> Caesium 132.90545196	56 <b>Ba</b> Barium 137.327	87 <b>Fr</b> Francium (223)	88 <b>Ra</b> Radium (226)	89-103 † Actinides	21 <b>Sc</b> Scandium 44.955908	22 <b>Ti</b> Titanium 47.867	23 <b>V</b> Vanadium 50.9415	24 <b>Cr</b> Chromium 51.9961	25 <b>Mn</b> Manganese 54.938044	26 <b>Fe</b> Iron 55.845	27 <b>Co</b> Cobalt 58.933194	28 <b>Ni</b> Nickel 58.6934	29 <b>Cu</b> Copper 63.546	30 <b>Zn</b> Zinc 65.38	49 <b>In</b> Indium 114.818	50 <b>Sn</b> Tin 118.710	81 <b>Tl</b> Thallium 204.38	82 <b>Pb</b> Lead 207.2	83 <b>Bi</b> Bismuth 208.98040	84 <b>Po</b> Polonium (209)	85 <b>At</b> Astatine (210)	86 <b>Rn</b> Radon (222)		
37 <b>Rb</b> Rubidium 85.4678	38 <b>Sr</b> Strontium 87.62	55 <b>Cs</b> Caesium 132.90545196	56 <b>Ba</b> Barium 137.327	87 <b>Fr</b> Francium (223)	88 <b>Ra</b> Radium (226)	† Actinides	89-103 † Actinides	89-103 † Actinides	89-103 † Actinides	41 <b>Nb</b> Niobium 92.90637	42 <b>Mo</b> Molybdenum 95.95	43 <b>Tc</b> Technetium (98)	44 <b>Ru</b> Ruthenium 101.07	45 <b>Rh</b> Rhodium 102.9055	46 <b>Pd</b> Palladium 106.42	47 <b>Ag</b> Silver 107.8682	48 <b>Cd</b> Cadmium 112.414	49 <b>In</b> Indium 114.818	50 <b>Sn</b> Tin 118.710	51 <b>Sb</b> Antimony 121.760	52 <b>Te</b> Tellurium 127.60	81 <b>Tl</b> Thallium 204.38	82 <b>Pb</b> Lead 207.2	83 <b>Bi</b> Bismuth 208.98040	84 <b>Po</b> Polonium (209)	85 <b>At</b> Astatine (210)	86 <b>Rn</b> Radon (222)		
57 <b>La</b> Lanthanum 138.90547	58 <b>Ce</b> Cerium 140.116	59 <b>Pr</b> Praseodymium 140.90766	60 <b>Nd</b> Neodymium 144.242	61 <b>Pm</b> Promethium (145)	62 <b>Sm</b> Samarium 150.36	63 <b>Eu</b> Europium 151.964	64 <b>Gd</b> Gadolinium 157.25	65 <b>Tb</b> Terbium 158.92535	66 <b>Dy</b> Dysprosium 162.500	67 <b>Ho</b> Holmium 164.93033	68 <b>Er</b> Erbium 167.259	69 <b>Tm</b> Thulium 168.93422	70 <b>Yb</b> Ytterbium 173.054	71 <b>Lu</b> Lutetium 174.9668	89 <b>Ac</b> Actinium (227)	90 <b>Th</b> Thorium 232.0377	91 <b>Pa</b> Protactinium 231.03588	92 <b>U</b> Uranium 238.02891	93 <b>Np</b> Neptunium (237)	94 <b>Pu</b> Plutonium (244)	95 <b>Am</b> Americium (243)	96 <b>Cm</b> Curium (247)	97 <b>Bk</b> Berkelium (247)	98 <b>Cf</b> Californium (251)	99 <b>Es</b> Einsteinium (252)	100 <b>Fm</b> Fermium (257)	101 <b>Md</b> Mendelevium (258)	102 <b>No</b> Nobelium (259)	103 <b>Lr</b> Lawrencium (262)

\* Lanthanides

† Actinides

Solid	Gas	Liquid	Unknown
-------	-----	--------	---------

Metals				
Noble Gases	Other nonmetals	Metalloids	Posttransition metals	Transition metals
Halogens	Other nonmetals	Metalloids	Transition metals	Transition metals
			Lanthanoids	Lanthanoids
			Actinoids	Actinoids
			Alkaline earth metals	Alkaline earth metals
			Alkali metals	Alkali metals

# EOS scientific

Your reliable source of quality laboratory products



ALWSCI®  
Technologies



ROTH®



cobetter®  
filtration



LABSOLV



NEWSTAR 新星



RW™

Product catalogue 2021



## WE ARE A LEADING SUPPLIER OF LABORATORY PRODUCTS

*EOS Scientific*, part of RCI Labscan group, was established on July 1, 2009 to market, sell, and distribute chemicals and laboratory products in Asia Pacific. The company is managed by scientists and chemists with advanced degrees and decades of hands-on experience.

## WE ARE MORE THAN JUST A TRADING COMPANY

### Our differentiation

- *We pre-qualify, test and approve* all our brands. we constantly review & audit our suppliers to make sure our customers get the best quality and value.
- Our *own testing laboratory* allows us to control and ensure the quality of our products.
- We also have our *own manufacturing facilities* to produce some of our key products.

## CONTACT DETAILS

**EOS**  
scientific

**EOS Scientific Co., Ltd.**

24 Rama 1 Road, Rongmuang, Pathumwan, Bangkok 10330, Thailand.

Tel: 0 2613 7911-4, 0 2613 7600-5 Fax: 0 2613 7915

E-mail: [marketing.e@eosscientific.com](mailto:marketing.e@eosscientific.com)

**[www.eosscientific.com](http://www.eosscientific.com)**



## OUR BRANDS & PRODUCTS



*The expert of chromatography consumables*

As a global supplier of Chromatography Vials, Closures, Septa and Syringe filters, ALWSCI devote analytical test and laboratory consumables to provide high quality, efficient service and innovation

## AUTOSAMPLER VIALS AND CLOSURES

### Screw Neck ND8

- Standard opening vials for GC and HPLC, used on instruments of Shimadzu, Varian, Gilson etc.
- To meet your micro sampling needs, ALWSCI has a variety of micro volume inserts with capacities and designs that can transform our vials from full-capacity to limited volume with one simple step.
- Standard opening requires Micro-insert with a diameter of 5mm.
- Micro inserts with flat bottom, conical base, with plastic spring are available.
- The conical design permits complete sample removal.

### Vial



CODE NO.	DESCRIPTION	UNIT
<b>2ml, 8-425 Screw Thread Vial, 12 x 32 mm</b>		
C0000001	Clear, Flat Base.	100/pk
C0000002	Clear, Flat Base with Label.	
C0000750	Clear, Flat Base with Label and ALWSCI Printing.	
C0000003	Amber, Flat Base.	
C0000004	Amber, Flat Base with Label.	
C0000751	Amber, Flat Base with Label and ALWSCI Printing.	

### Cap and Septa



CODE NO.	DESCRIPTION	SEPTA TYPE	SPECIFICATIONS	UNIT
<b>2ml, 8-425 (8mm) Cap and Septa.</b>				
C0000133	Black, Open Top Screw	Red PTFE/White Silicone Septa 1.5mm.	-60 °C to 180 °C	100/pk
C0000409	White, Open Top PP	White PTFE/Red Silicone Septa 1.5mm.		



## Cap



CODE NO.	DESCRIPTION	UNIT
<b>2ml, 8-425 (8mm) Cap</b>		
C0000931	Black, Open Top Screw Cap.	100/pk
C0000957	White, Open Top Screw Cap.	

## Septa



CODE NO.	SEPTA TYPE	SPECIFICATIONS	UNIT
<b>2ml, 8-425 (8mm) Septa.</b>			
C0000436	Red PTFE/White Silicone Septa 1.0mm.	-60 °C to 180 °C	100/pk
C0000943	Red PTFE/White Silicone Septa 1.3mm.		
C0000321	Red PTFE/White Silicone Septa 1.5mm.		
C0000964	Red PTFE/White Silicone Septa 1.5mm. Pre-slit.		
C0000445	White PTFE/Red Silicone Septa 1.5mm.		
C0000999	Blue PTFE/White Silicone Septa 1.5mm.		

## Micro Insert



CODE NO.	DESCRIPTION	UNIT
<b>2ml, 8-425, 5mm</b>		
C0000074	5 x 29 mm Insert Clear Glass Conical Base with Polyspring.	100/pk
C0000075	5 x 31 mm Insert Clear Glass Conical Base.	
C0000076	5 x 31 mm Insert Clear Glass Flat Base.	

## Short Neck ND9

- Wide opening 9-425 vials can be used on all common autosamplers, perfectly compatible with agilent, thermo Scientific, Waters, Varian, etc.
- Vials with intergrated micro-insert are available in clear and amber glass.
- Wide opening 12x32mm, 2ml Polypropylene vials have chemically resistance, which are used for atomic absorption, water and protein analysis, capillary electrophoresis, ion chromatography applications etc.
- PTFE/silicone slit shape choices are Single, Y-shape, Cross available.
- The polymer spring acts as a shock absorber that protects against breakage if the needle bottoms out.
- Vials and closures are available for packing into a kit to reduce the risk of contamination of vials in laboratories.
- A variety of septa colors and pre-assmbled closures are available to offer as request.

## Vial



CODE NO.	DESCRIPTION	UNIT
<b>2ml, 9-425 Screw Thread Vial, 12 x 32 mm</b>		
C0000006	Clear, Flat Base.	100/pk
C0000008	Clear, Flat Base with Label.	
C0000752	Clear, Flat Base with Label and ALWSCI Printing.	
C0000010	Amber, Flat Base.	
C0000011	Amber, Flat Base with Label.	
C0000753	Amber, Flat Base with Label and ALWSCI Printing.	
C0000084	0.3ml PP, Micro –Vial Transparent.	
C0000410	Wide Opening PP with Graduations Transparent	
C0000127	Clear, Bottom with Integrated 0.2ml Glass Micro-insert.	

## Cap and Septa



CODE NO.	DESCRIPTION	SEPTA TYPE	SPECIFICATIONS	UNIT
<b>2ml, 9-425 (9mm) Cap and Septa.</b>				
C0000143	Blue, Open Top Ribbed	Red PTFE/White Silicone Septa 1.5mm.	-60 °C to 180 °C	100/pk
C0000148		Red PTFE/White Silicone Septa 1.5mm. Pre-slit.		
C0000149		Blue PTFE/White Silicone Septa 1.5mm. Pre-slit.		
C0000426	Green, Open Top Smooth	Red PTFE/White Silicone Septa 1.5mm.		
C0000428	Yellow, Open Top Smooth			

## Cap



CODE NO.	DESCRIPTION	UNIT
<b>2ml, 9-425 (9mm) Cap</b>		
C0000421	Blue, Open Top Smooth Screw Cap.	100/pk
C0000327	Blue, Open Top Ribbed Screw Cap.	
C0001132	Black, Open Top Smooth Screw Cap.	
C0001051	Black, Open Top Ribbed Screw Cap.	
C0000856	Gold Magnetic, Open Top Screw Cap.	

## Septa



CODE NO.	SEPTA TYPE	SPECIFICATIONS	UNIT
<b>2ml, 9-425 (9mm) Septa.</b>			
C0000402	Red PTFE/White Silicone Septa 1.0mm.	-60 °C to 180 °C	100/pk
C0000329	White PTFE/Red Silicone Septa 1.0mm.		
C0000439	Blue PTFE/White Silicone Septa 1.0mm.		
C0000324	Red PTFE/White Silicone Septa 1.0mm. Pre-slit.		
C0000431	Blue PTFE/White Silicone Septa 1.0mm. Pre-slit.		
C0001133	Red PTFE/White Silicone Septa 1.0mm. Pre-slit. (Mercedes Shape)		
C0000801	Red PTFE/White Silicone Septa 1.0mm. Pre-slit. (Cross Shape)		
C0000460	Natural PTFE/White Silicone Septa 1.0mm.		

## Micro Insert



CODE NO.	DESCRIPTION	UNIT
<b>2ml, 9-425, 6mm</b>		
C0000070	6 x 29 mm Insert Clear Glass Conical Base with Polyspring.	100/pk
C0000072	6 x 31 mm Insert Clear Glass Conical Base.	
C0000073	6 x 31 mm Insert Clear Glass Flat Base.	
C0000077	6 x 29 mm PP Insert Conical Base.	

## Snap Neck ND11

- The vials are used on instruments of Agilent, CTC, Thermo Scientific, Waters, etc.
- Snap Ring finish eliminates the need for crimping or decapping.
- The intergrated Micro-insert are available for in clear and amber glass, micro-inserts can be delivered preassembled in vials.
- Snap ring caps are also available in a soft quality with transparent or blue caps, soft caps are more convenient in handing (pushing on/removal).
- The septa shapes have Single and Snow type to choose.

## Vial



CODE NO.	DESCRIPTION	UNIT
<b>2ml, Snap Vial, 11 mm</b>		
C0000020	Clear, Flat Base.	100/pk
C0000021	Clear, Flat Base with Label.	
C0000022	Amber, Flat Base.	
C0000023	Amber, Flat Base with Label.	
C0000130	Clear, Bottom with Integrated 0.2ml Glass Micro-insert.	

## Cap and Septa



CODE NO.	DESCRIPTION	SEPTA TYPE	SPECIFICATIONS	UNIT
<b>2ml, 11mm Snap Cap and Septa.</b>				
C0000170	Clear, Open Top Snap	Red PTFE/White Silicone Septa 1.0mm.	-60 °C to 180 °C	100/pk
C0000171	Blue, Open Top Snap			
C0000172	Red, Open Top Snap			
C0000173	Clear, Open Top Snap	Red PTFE/White Silicone/Red PTFE Septa 1.0mm.	-40 °C to 120 °C	
C0000174		Red PTFE/White Silicone Septa 1.0mm. Pre-slit		
C0000175		Red PTFE/White Silicone Septa 1.0mm. Pre-slit (snow shape)		
C0000176		Transparent TEF/Natural Rubber red-orange Septa 1.0mm.		
C0000177		White PTFE/Red Silicone Septa 1.0mm.	-60 °C to 180 °C	



## Crimp Neck ND11

- The Crimp Vials are used on instruments of Agilent, PerkinElmer, Varian, etc.
- The wide opening crimp cap provides a larger target area for improved autosampler needle accuracy.
- Vials with intergrated Micro-insert are also available in clear and amber glass.
- PTFE/silicone, Natural Rubber/TEF septa, single slit septa to choose.
- The 3-layer septa of Natural Rubber/Red Butyl/TEF combines the good physical properties of Nat. Rubber (Resealability) with good chemical properties of butyl. (See Customized service page)

## Vial



CODE NO.	DESCRIPTION	UNIT
<b>2ml, Crimp Vial, 11 mm</b>		
C0000014	Clear, Flat Base.	100/pk
C0000015	Clear, Flat Base with Label.	
C0000016	Amber, Flat Base.	
C0000018	Amber, Flat Base with Label.	
C0000129	Clear, Bottom with Integrated 0.2ml Glass Micro-insert.	

## Cap and Septa



CODE NO.	DESCRIPTION	SEPTA TYPE	SPECIFICATIONS	UNIT
<b>2ml, 11mm Crimp Cap and Septa.</b>				
C0000164	Silver, Open Top Crimp	Clear PTFE/Red Silicone Septa 1.0mm	-60 °C to 180 °C	100/pk
C0000165		Red PTFE/White Silicone Septa 1.0mm.		
C0000166		Red PTFE/White Silicone/Red PTFE Septa 1.0mm.		
C0000167		Red Silicone Septa 1.0mm.		
C0000168		White PTFE/Red Silicone Septa 1.0mm.		
C0000169		Transparent TEF/Natural Rubber red-orange Septa 1.0mm.	-40 °C to 120 °C	
C0000980		Red PTFE/White Silicone Septa 1.0mm. Pre-slit.	-60 °C to 180 °C	

## Short Thread ND13

- The vials are used on instruments of Dionex, Shimadzu, VWR, Waters etc.
- 4ML vials are widely used in compound storage as well as for Chromatography vials, available as closed or open top screw seals with 13-425 thread.

### Vial



CODE NO.	DESCRIPTION	UNIT
<b>4ml, 13-425 Screw Thread Vial, 15 x 45 mm</b>		
C0000024	Clear, Flat Base.	100/pk
C0000025	Clear, Flat Base with Label.	
C0000026	Amber, Flat Base.	
C0000027	Amber, Flat Base with Label.	

### Cap and Septa



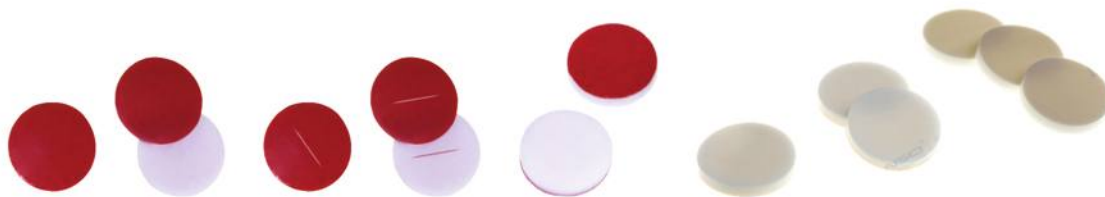
CODE NO.	DESCRIPTION	SEPTA TYPE	SPECIFICATIONS	UNIT
<b>4ml, 13-425 (13mm) Cap and Septa.</b>				
C0000179	Black, Open Top Screw	Red PTFE/White Silicone Septa 1.0mm.	-60 °C to 180 °C	100/pk
C0000180		Red PTFE/White Silicone Septa 1.0mm. Pre-slit.		
C0000181		White PTFE/Red Silicone Septa 1.0mm.		
C0000182		Natural PTFE/White Silicone Septa 1.0mm.		

### Cap



CODE NO.	DESCRIPTION	UNIT
<b>4ml, 13-425 (13mm) Cap</b>		
C0000320	Black PP, Open Top Screw Cap.	100/pk

## Septa



CODE NO.	SEPTA TYPE	SPECIFICATIONS	UNIT
<b>2ml, 13-425 (13mm) Septa.</b>			
C0000322	Red PTFE/White Silicone Septa 1.0mm.	-60 °C to 180 °C	100/pk
C0000408	Red PTFE/White Silicone Septa 1.0mm. Pre-slit.		
C0000863	White PTFE/Red Silicone Septa 1.0mm.		
C0000935	Natural PTFE/White Silicone Septa 1.0mm.		
C0001134	Pure PTFE Septa 1.0mm.		

## Shell Vial

- The vial with soft plug is used on Waters and Shimadzu, the star-shaped plug is for easy penetration.
- The normal size is 8x40mm, and 8x30mm is also available.



CODE NO.	DESCRIPTION	UNIT
<b>1ml, 8 x 40 mm</b>		
C0000078	Clear, Flat Base Shell Vial with Plug.	200/pk
<b>1ml, 8 x 30 mm</b>		
C0000080	Clear, Flat Base Shell Vial with Plug.	200/pk



## Headspace Vials and Closures

### Crimp Top Headspace

- GC Headspace technology for the analysis of volatile organic solids and liquid samples after gasification
- The headspace volume have 6ml, 10ml, 20ml clear/amber to choose, the bottom have flat, rounded and rounded-flat.
- **Type of Cap:**  
Aluminum Cap, Bimetal cap, Magnetic crimp cap.
- **Type of Liner:**  
Butyl, Butyl/PTFE, Pharma-fix liner, PTFE/silicone, Butyl stopper.

### Vial



CODE NO.	DESCRIPTION	UNIT
<b>6 ml, 22 x 38 mm</b>		
C0000032	Clear, Flat Bottom. Short Neck.	100/pk
<b>10 ml, 22.5 x 46 mm</b>		
C0000033	Clear, Flat Bottom.	100/pk
C0000034	Clear, Rounded-Flat Bottom.	100/pk
C0000035	Amber, Flat Bottom.	100/pk
<b>20 ml, 22.5 x 75 mm</b>		
C0000036	Clear, Flat Bottom.	100/pk
C0000038	Clear, Rounded-Flat Bottom.	100/pk
C0000039	Clear, Rounded-Flat Bottom. Short Neck.	100/pk
C0000040	Amber, Rounded-Flat Bottom. Short Neck.	100/pk





## Cap and Septa



CODE NO.	DESCRIPTION	SEPTA TYPE	SPECIFICATIONS	UNIT
<b>20mm Crimp Cap (10mm hole)</b>				
C0000196	Top Aluminum	Natural PTFE/White Silicone septa	-60 °C to 180 °C	100/pk
C0000197		Natural PTFE/Blue Silicone septa		
C0000198		White PTFE/White Silicone septa		
C0000199		White PTFE/Blue Silicone septa		
C0000200		Red PTFE/White Silicone septa		
C0000201		Natural PTFE/ Natural Silicone septa		
C0000204	Top Gold Magnetic	Natural PTFE/ Blue Silicone septa	-60 °C to 180 °C	100/pk
C0000205		Natural PTFE/ White Silicone septa		
C0000835		White PTFE/ Blue Silicone septa		
<b>20mm Crimp Cap (8mm hole)</b>				
C0000206	Top Bi-Metallic Blue & Silver	Natural PTFE/ White Silicone septa	-60 °C to 180 °C	100/pk
C0000207		Natural PTFE/ Natural Silicone septa		
C0000951		Natural PTFE/ Natural Silicone septa		
C0000952		Natural PTFE/ Natural Silicone septa		
<b>20.2mm Crimp Cap (10mm hole)</b>				
C0000855	Top Aluminum	Moulded Grey PTFE/Butyl Septa one ring	-40 °C to 120 °C	100/pk
C0001012		Moulded Pharma-fix-septa Grey PTFE/Butyl		

## 20mm Butyl Septa



CODE NO.	SEPTA TYPE	SPECIFICATIONS	UNIT
C0000407	Moulded Grey PTFE/Butyl Septa one ring	-40 °C to 120 °C	100/pk
C0000433	Moulded Grey Butyl Injection Stopper		
C0000448	Moulded Grey Butyl Septa one ring		
C0000449	Moulded Grey Butyl Septa both rings		
C0000450	Grey PTFE/Butyl without ring		
C0000423	Moulded Pharma-fix-septa Grey PTFE/Butyl		

## Screw Top Headspace

- Pre-assembling vial+closure service is available upon request.
- The magnetic screw caps can be used for headspace as well as for SPME.
- Type of Cap: Magnetic Precision screw cap, Closed Precision screw cap.

### Vial



CODE NO.	DESCRIPTION	UNIT
<b>10 ml, 22.5 x 46 mm</b>		
C0000028	Clear, Glass Precision Screw.	100/pk
C0000029	Amber, Glass Precision Screw.	
<b>20 ml, 22.5 x 75 mm</b>		
C0000030	Clear, Glass Precision Screw.	100/pk
C0000031	Amber, Glass Precision Screw.	

### Vials, Septa and Closures



CODE NO.	DESCRIPTION	UNIT
<b>10 ml, 22.5 x 46 mm</b>		
C0000977	Clear, Glass Precision Screw 18mm Silver Open Top Cap with Blue PTFE/White silicone	100/pk
<b>20 ml, 22.5 x 75 mm</b>		
C0000976	Clear, Glass Precision Screw 18mm Silver Open Top Cap with Blue PTFE/White silicone	100/pk

### Cap and Septa



CODE NO.	DESCRIPTION	SEPTA TYPE	SPECIFICATIONS	UNIT
<b>18mm Screw Top Cap (8mm hole)</b>				
C0000208	Silver Color Open Top Metal Cap	Blue PTFE/White Silicone septa 1.5mm.	-60 °C to 180 °C	100/pk
C0000474	Silver Color Closed Top Metal Cap	Blue PTFE/White Silicone septa 1.5mm.		

## Cap



CODE NO.	DESCRIPTION	UNIT
<b>18mm Screw Top Cap (8mm hole)</b>		
C0000920	Silver Color Open Top Metal Cap	100/pk
C0001139	Silver Color Closed Top Metal Cap	

## Septa



CODE NO.	SEPTA TYPE	SPECIFICATIONS	UNIT
<b>18mm Screw Top Cap (8mm hole)</b>			
C0000400	Blue PTFE/White Silicone septa 1.5mm.	-60 °C to 180 °C	100/pk
C0000438	Red PTFE/White Silicone septa 1.5mm.		



## Sample Vials and Closures

- Screw vials for storage purpose, vials with different volumes are available.
- Vial Color: Clear, Amber.
- Cap Color: White, Black, Red, Blue, Yellow, Green, etc.
- Septa material: PE, PTFE/Silicone, Silicone only, etc.
- Pre-assemble service is available.

### Vial

CODE NO.	DESCRIPTION	UNIT
<b>2 ml, 12 x 32 mm</b>		
C000006	Clear, Sample 9-425 Screw Thread.	100/pk
C000041	Amber, Sample 9-425 Screw Thread.	
<b>4 ml, 15 x 45 mm</b>		
C000024	Clear, Sample 13-425 Screw Thread.	100/pk
C000044	Amber, Sample 13-425 Screw Thread.	
<b>7 ml, 22 x 40 mm</b>		
C000048	Clear, Sample 18-400 Screw Thread.	100/pk
C000049	Amber, Sample 18-400 Screw Thread.	
<b>8 ml, 17 x 60 mm</b>		
C000051	Clear, Sample 15-425 Screw Thread.	100/pk
C000052	Amber, Sample 15-425 Screw Thread.	
<b>10 ml, 22 x 52 mm</b>		
C000053	Clear, Sample 18-400 Screw Thread.	100/pk
C000054	Amber, Sample 18-400 Screw Thread.	
<b>16 ml, 22 x 72.5 mm</b>		
C000055	Clear, Sample 18-400 Screw Thread.	100/pk
C000056	Amber, Sample 18-400 Screw Thread.	
<b>20 ml, 27.5 x 57 mm</b>		
C000057	Clear, Sample 24-400 Screw Thread.	100/pk
C000058	Amber, Sample 24-400 Screw Thread.	
<b>22 ml, 23 x 85 mm</b>		
C0001222	Clear, Sample 20-400 Screw Thread.	100/pk
C0001223	Amber, Sample 20-400 Screw Thread.	
<b>30 ml, 27.5 x 84 mm</b>		
C000059	Clear, Sample 24-400 Screw Thread.	100/pk
C000060	Amber, Sample 24-400 Screw Thread.	
<b>40 ml, 27.5 x 95 mm</b>		
C000061	Clear, Sample 24-400 Screw Thread.	100/pk
C000062	Amber, Sample 24-400 Screw Thread.	
<b>60 ml, 27.5 x 140 mm</b>		
C000065	Clear, Sample 24-400 Screw Thread.	100/pk
C000066	Amber, Sample 24-400 Screw Thread.	

## Cap



CODE NO.	DESCRIPTION	UNIT
<b>9-425</b>		
C0000453	Blue Smooth Closed PP Top Cap.	100/pk
<b>13-425</b>		
C0000455	Black Closed Top PP Cap.	100/pk
C0000864	White Closed Top PP Cap.	
C0001135	Red Closed Top PP Cap.	
C0000858	Green Closed Top PP Cap.	
<b>15-425</b>		
C0000482	Black Closed Top PP Cap.	100/pk
C0000988	White Closed Top PP Cap.	
<b>18-400</b>		
C0000480	Black Closed Top PP Cap.	100/pk
C0000456	White Closed Top PP Cap.	
<b>20-400</b>		
C0001136	Black Closed Top PP Cap.	100/pk
C0000859	White Closed Top PP Cap.	
<b>22-400</b>		
C0000860	Black Closed Top PP Cap.	100/pk
C0000475	White Closed Top PP Cap.	
<b>24-400</b>		
C0000481	Black Closed Top PP Cap.	100/pk
C0000457	White Closed Top PP Cap.	

## Septa



CODE NO.	SEPTA TYPE	SPECIFICATIONS	UNIT
<b>9-425</b>			
C0000402	Red PTFE/White Silicone septa 1.0mm.	-60 °C to 180 °C	100/pk
<b>13-425</b>			
C0000322	Red PTFE/White Silicone septa 1.0mm.	-60 °C to 180 °C	100/pk
<b>15-425</b>			
C0000458	Natural PTFE/White Silicone septa 1.0mm.	-60 °C to 180 °C	100/pk
<b>18-400</b>			
C0000440	Natural PTFE/White Silicone septa 1.5mm.	-60 °C to 180 °C	100/pk
<b>20-400</b>			
C0000958	Natural PTFE/White Silicone septa 2.0mm.	-60 °C to 180 °C	100/pk
<b>22-400</b>			
C0000862	Natural PTFE/White Silicone septa 2.0mm.	-60 °C to 180 °C	100/pk
<b>24-400</b>			
C0000443	Natural PTFE/White Silicone septa 1.5mm.	-60 °C to 180 °C	100/pk



## Narrow Mouth Bottle

- Boston bottles are widely used for packing of Pharmaceutical intermediate, High value-added chemicals, Fragrance sesame oil, and etc.
- The PTFE/silicone perfect sealing is suitable for long time storage and transportation, PE liner is for an economical choice.
- Pre-assemble service is available.

### Vial



CODE NO.	DESCRIPTION	UNIT
<b>30 ml, 32.8 x 78.58 mm</b>		
C0000115	Amber, 20-400 Boston Round Bottle.	48/pk
C0000116	Clear, 20-400 Boston Round Bottle.	
<b>60 ml, 38.6 x 93.66 mm</b>		
C0000118	Amber, 20-400 Boston Round Bottle.	48/pk
C0000119	Clear, 20-400 Boston Round Bottle.	
<b>120 ml, 48.8 x 112.73 mm</b>		
C0000121	Amber, 22-400 Boston Round Bottle.	24/pk
C0000122	Clear, 22-400 Boston Round Bottle.	
<b>250 ml, 61.6 x 140.80 mm</b>		
C0000123	Amber, 24-400 Boston Round Bottle.	30/pk
<b>500 ml, 83 x 176.50 mm</b>		
C0000124	Amber, 28-400 Boston Round Bottle.	12/pk
<b>1,000 ml, 94 x 219 mm</b>		
C0000125	Amber, 33-400 Boston Round Bottle.	8/pk

--ALWSCI Technologies--

## Be Simple, Be Professional

Focus On Chromatography Consumables

Autosampler Vials  
  Syringe Filter  
  OEM



## Cap and Septa



CODE NO.	DESCRIPTION	SEPTA TYPE	SPECIFICATIONS	UNIT
<b>20-400</b>				
C0001126	Black Closed Top PP Cap.	Natural PTFE/White Silicone septa 2.0mm.	-60 °C to 180 °C	48/pk
C0001127		White PE septa 1.0mm.	-20 °C to 80 °C	
<b>22-400</b>				
C0001128	Black Closed Top PP Cap.	Natural PTFE/White Silicone septa 2.0mm.	-60 °C to 180 °C	24/pk
C0001129		White PE septa 1.0mm.	-20 °C to 80 °C	
<b>24-400</b>				
C0001130	Black Closed Top PP Cap.	Natural PTFE/White Silicone septa 1.5mm.	-60 °C to 180 °C	30/pk
C0001131		White PE septa 1.0mm.	-20 °C to 80 °C	
<b>28-400</b>				
C0000229	Black Closed Top PP Cap.	Natural PTFE/White Silicone septa 1.5mm.	-60 °C to 180 °C	12/pk
C0000230		White PE septa 1.0mm.	-20 °C to 80 °C	
<b>33-400</b>				
C0000231	Black Closed Top PP Cap.	Natural PTFE/White Silicone septa 1.5mm.	-60 °C to 180 °C	8/pk
C0000233		White PTFE septa 0.5mm.		
C0000235		White PE septa 1.0mm.	-20 °C to 80 °C	



## Tools

- The tools of Vial Rack, Crimper, Decrimper, Safety Caps, GC Septa are widely matched with the chromatography consumables to use.

### Vial Rack

- Easy handling and transportation of sample vials.
- Stable standing position because of solid construction.



CODE NO.	DESCRIPTION	UNIT
C0000094	PP Vial Rack 50 Positions for 2ml Vials Blue Color	1/pk
C0000095	PP Vial Rack 50 Positions for 4ml Vials Blue Color	
C0000096	PP Vial Rack for EPA VOA Vials White Color	
C0001067	PP Vial Box 100 Positions for 2ml Vials Blue Color 14 x 14 x 5 cm.	

### Crimper and Decrimper



CODE NO.	DESCRIPTION	UNIT
C0000265	Crimper for 11mm Aluminum Crimp Cap Stainless Steel.	1/pk
C0000264	Crimper for 20mm Aluminum Crimp Cap Stainless Steel.	
C0000266	Stainless Steel Crimper for 13mm Flip off Cap.	
C0000267	Stainless Steel Crimper for 20mm Flip off Cap.	
C0000268	Decrimper for 11mm Aluminum Crimp Cap Stainless Steel.	
C0000269	Decrimper for 20mm Aluminum Crimp Cap Stainless Steel.	

STAR PRODUCTS

# STAR PRODUCTS

40ML TOC VOC Vial Kit  
Purge&Trap-GC/MS Certified

2ML Vial Kit--Ultra Clean  
LC/MS and GC/MS Certified



## Safety Caps Thread GL45

- GL45 screw cap is also called mobile phase safety cap.
- Inner PTFE can be rotation smooth to make sure the connected tube is flexible.
- Blue, Red, Yellow color are available, corresponding fitting and plug are available as well.



CODE NO.	DESCRIPTION	UNIT
<b>1/8 inch OD tubing.</b>		
C0000270	Blue GL45 Safety Cap with Two holes	100/pk
C0000271	Red GL45 Safety Cap with Three holes	
C0000272	Yellow GL45 Safety Cap with Four holes	
C0000970	1/4-28 PEEK Fitting, Natural Color.	
<b>1/16 inch OD tubing.</b>		
C0000273	Blue GL45 Safety Cap with Two holes	100/pk
C0000274	Red GL45 Safety Cap with Three holes	
C0000275	Yellow GL45 Safety Cap with Four holes	
C0000969	10-32unf PEEK Fitting, Natural Color.	
C0000971	10-32unf PEEK Blind Plug, Natural Color.	



## Syringe Filter

- Filtration is achieved by pushing the sample through the membrane with a syringe or other luer-connection device.
- Syringe Filters allow you to control the rate off low, which can be critical with delicate samples. It also allows you to filter into nearly any tube, vial, or column that represents the next step in your analysis.

### Syringe Filter Selection Guide

- Syringe filters are used for many routine preparation steps in laboratories all over the world.
- They are convenient, ready-to use disposables for removal of particles from solutions and gases.
- LABFIL syringe filters are for a wide range of applications.
- The filters are clean and safe as they are virtually free of leachables and extractables and reliably remove particles and microorganisms without any leakage.

SYRINGE FILTER CAPACITIES	SAMPLE VOLUME
13mm Syringe Filter	less or equal 10mL
25mm Syringe Filter	less or equal 100mL
30mm Syringe Filter	less or equal 150mL

PRE-CUT MEMBRANE CAPACITIES	SAMPLE VOLUME
13mm Pre-Cut Membranes	up to 20mL
25mm Pre-Cut Membranes	up to 100mL
47mm Pre-Cut Membranes	multi-liter

## Welded Syringe Filter



CODE NO.	DESCRIPTION	DIMENSION (mm)	PORE SIZE (um)	UNIT
C0000277	Nylon	13	0.22	100/pk
C0000278			0.45	
C0000279		25	0.22	
C0000280			0.45	
C0000293	PES	13	0.22	
C0000294			0.45	
C0000295		25	0.22	
C0000296			0.45	
C0000281	PTFE (Hydrophilic)	13	0.22	
C0000282			0.45	
C0000283		25	0.22	
C0000284			0.45	
C0000297	PTFE (Hydrophobic)	13	0.22	
C0000298			0.45	
C0000299		25	0.22	
C0000300			0.45	
C0000289	PVDF (Hydrophilic)	13	0.22	
C0000290			0.45	
C0000291		25	0.22	
C0000292			0.45	
C0000285	PVDF (Hydrophobic)	13	0.22	
C0000286			0.45	
C0000287		25	0.22	
C0000288			0.45	

## Economy Syringe Filter

- In order to meet different customers' request, LABFIL supply the syringe filters with outer ring as well.
- It's available in many different pore sizes and with several hydrophilic or hydrophobic membrane materials.
- More Economic.
- Reliable removal of microorganisms and particles from liquids for HPLC sample preparation.
- High mechanical and tensile strength.

TYPE	COLOR 0.45 UM	COLOR 0.22UM
MCE	Green	Light Green
NY	Yellow	Light Yellow
PES	Green	Light Green
PVDF (Hydrophilic/Hydrophobic)	Purple	Light Purple
PTFE (Hydrophilic/Hydrophobic)	Red	Pink



CODE NO.	DESCRIPTION	DIMENSION (mm)	PORE SIZE (um)	UNIT
C0000602	Nylon	13	0.22	100/pk
C0000603			0.45	
C0000604		25	0.22	
C0000605			0.45	
C0000622	PES	13	0.22	
C0000623			0.45	
C0000624		25	0.22	
C0000625			0.45	
C0000606	PTFE (Hydrophilic)	13	0.22	
C0000607			0.45	
C0000608		25	0.22	
C0000609			0.45	
C0000610	PTFE (Hydrophobic)	13	0.22	
C0000611			0.45	
C0000612		25	0.22	
C0000613			0.45	
C0000614	PVDF (Hydrophilic)	13	0.22	
C0000615			0.45	
C0000616		25	0.22	
C0000617			0.45	
C0000618	PVDF (Hydrophobic)	13	0.22	
C0000619			0.45	
C0000620		25	0.22	
C0000621			0.45	
C0001239	MCE	13	0.22	
C0001240			0.45	
C0001241		25	0.22	
C0001242			0.45	

## Sterile Syringe Filter



CODE NO.	DESCRIPTION	DIMENSION (mm)	PORE SIZE (um)	UNIT
C0000524	Nylon	13	0.22	100/pk
C0000525			0.45	
C0000526		25	0.22	50/pk
C0000527			0.45	
C0000544	PES	13	0.22	100/pk
C0000545			0.45	
C0000546		25	0.22	50/pk
C0000547			0.45	
C0000528	PTFE (Hydrophilic)	13	0.22	100/pk
C0000529			0.45	
C0000530		25	0.22	50/pk
C0000531			0.45	
C0000532	PTFE (Hydrophobic)	13	0.22	100/pk
C0000533			0.45	
C0000534		25	0.22	50/pk
C0000535			0.45	
C0000536	PVDF (Hydrophilic)	13	0.22	100/pk
C0000537			0.45	
C0000538		25	0.22	50/pk
C0000539			0.45	
C0000540	PVDF (Hydrophobic)	13	0.22	100/pk
C0000541			0.45	
C0000542		25	0.22	50/pk
C0000543			0.45	





## Membrane Filter

- Choosing a membrane filter is based on the size and amount of particulate in the sample, the membrane's chemical compatibility with the sample matrix, and potential interactions (binding) between the membranes and the sample components. This table offers general guidelines on membrane characteristics and applications.

### Membrane Selection Guide

MEMBRANE TYPE	FEATURES	COMMON USES
Nylon	Good chemical compatibility and very low extractables	General filtrationsterilization, HPLC sample prep
Polytetrafluoroethylene (PTFE)	Compatible with strong acids and aggressive solvents	Gas, Air, and Solvent filtration
Polyvinylidene Fluoride (PVDF)	Good flow rate characteristics. Ideal for chromatography applications.	HPLC sample preparation and General filtration



CODE NO.	DESCRIPTION	DIMENSION (mm)	PORE SIZE (um)	UNIT
C0000875	CA	47	0.22	100/pk
C0000876			0.45	
C0000877		90	0.22	
C0000878			0.45	
C0000311	MCE	47	0.22	
C0000313			0.45	
C0000312		90	0.22	
C0000314			0.45	
C0000303	Nylon	47	0.22	
C0000305			0.45	
C0000304		90	0.22	
C0000306			0.45	
C0000891	PES	47	0.22	
C0000892			0.45	
C0000893		90	0.22	
C0000894			0.45	
C0000909	PVDF (Hydrophilic)	47	0.22	
C0000563			0.45	
C0000910		90	0.22	
C0000911			0.45	
C0000916	PVDF (Hydrophobic)	47	0.22	
C0000917			0.45	
C0000918		90	0.22	
C0000919			0.45	
C0000424	PTFE (Hydrophilic)	47	0.22	
C0000425			0.45	
C0000899		90	0.22	
C0000900			0.45	
C0000307	PTFE (Hydrophobic)	47	0.22	
C0000309			0.45	
C0000308		90	0.22	
C0000310			0.45	

## OUR BRANDS & PRODUCTS



*An expert for laboratory supplies, life science and chemicals,*

The partner that research, scientific and technical laboratories can rely on

### ROTIPURAN® Supra

This supra quality line (ppb-quality) is perfectly suitable for sample preparation in trace analysis (e.g. via ICP-OES, AAS, IC, etc.). Over 60 elements are specified and their content is below 1 ppb [parts per billion =  $10^{-9}$ ]. Bottled and delivered in special plastic bottles.

## PRODUCT OFFERING

PRODUCT CODE	ITEM NAME	PACK SIZE
HN50.2	Nitric acid Supra-quality ROTIPURAN® Supra, 69 %	1 L
HN50.3	Nitric acid Supra-quality ROTIPURAN® Supra, 69 %	2.5 L
HN51.3	Perchloric acid Supra-quality ROTIPURAN® Supra 70 %	1 L
HN51.4	Perchloric acid Supra-quality ROTIPURAN® Supra 70 %	2.5 L
HN52.2	Sulphuric acid Supra-quality ROTIPURAN® Supra, 95 %	1 L
HN52.5	Sulphuric acid Supra-quality ROTIPURAN® Supra, 95 %	2.5 L
HN53.2	Hydrochloric acid Supra-quality ROTIPURAN® Supra, 35 %	1 L
HN53.3	Hydrochloric acid Supra-quality ROTIPURAN® Supra, 35 %	2.5 L
HN53.4	Hydrochloric acid Supra-quality ROTIPURAN® Supra, 35 %	4 L
HN55.3	Acetic acid Supra-quality ROTIPURAN® Supra 100 %	1 L
HN55.4	Acetic acid Supra-quality ROTIPURAN® Supra 100 %	2.5 L
HN55.5	Acetic acid Supra-quality ROTIPURAN® Supra 100 %	4 L
NE57.2	Hydrochloric acid Supra-quality ROTIPURAN® Supra 30 %	1 L
NE57.3	Hydrochloric acid Supra-quality ROTIPURAN® Supra 30 %	2.5 L



## ROTI® STAR STANDARDS FOR AAS AND ICP

Carl ROTH has an extensive range of products which meets the highest standards of quality in the field of element standards and ion standards. The solutions and mixtures are made using materials of the highest purity, and therefore meet the requirements for instrumental analysis by AAS and ICP. All solutions are certified and can be traced to NIST standard reference materials. Solutions are produced according to ISO 17034 in an accredited environment. The solutions are tested in a laboratory accredited to ISO/IEC 17025 and supplied with a detailed, batch-specific certificate of analysis.

## PRODUCT OFFERING

PRODUCT CODE	ITEM NAME	PACK SIZE
2397.1	Aluminium ICP Standard Solution 1000 mg/l Al	100 ml
2397.2	Aluminium ICP Standard Solution 1000 mg/l Al	500 ml
2488.1	Aluminium ICP Standard Solution 10000 mg/l Al	100 ml
2398.1	Antimony ICP Standard Solution 1000 mg/l Sb	100 ml
2489.1	Antimony ICP Standard Solution 10000 mg/l Sb	100 ml
2399.1	Arsenic ICP Standard Solution 1000 mg/l As	100 ml
2399.2	Arsenic ICP Standard Solution 1000 mg/l As	30 ml
2491.1	Arsenic ICP Standard Solution 10000 mg/l As	100 ml
2400.1	Barium ICP Standard Solution 1000 mg/l Ba	100 ml
2400.2	Barium ICP Standard Solution 1000 mg/l Ba	500 ml
2492.1	Barium ICP Standard Solution 10000 mg/l Ba	100 ml
2492.2	Barium ICP Standard Solution 10000 mg/l Ba	500 ml
2401.1	Beryllium ICP Standard Solution 1000 mg/l Be	100 ml
2496.1	Beryllium ICP Standard Solution 10000 mg/l Be	100 ml
2402.1	Bismuth ICP Standard Solution 1000 mg/l Bi	100 ml
2497.1	Bismuth ICP Standard Solution 10000 mg/l Bi	100 ml
2404.1	Boron ICP Standard Solution 1000 mg/l B	100 ml
2404.2	Boron ICP Standard Solution 1000 mg/l B	500 ml
2500.1	Boron ICP Standard Solution 10000 mg/l B	100 ml
2500.2	Boron ICP Standard Solution 10000 mg/l B	500 ml
2405.1	Cadmium ICP Standard Solution 1000 mg/l Cd	100 ml
2501.1	Cadmium ICP Standard Solution 10000 mg/l Cd	100 ml
2406.1	Caesium ICP Standard Solution 1000 mg/l Cs	100 ml
2502.1	Caesium ICP Standard Solution 10000 mg/l Cs	100 ml
2407.1	Calcium ICP Standard Solution 1000 mg/l Ca	100 ml
2407.2	Calcium ICP Standard Solution 1000 mg/l Ca	500 ml
2503.1	Calcium ICP Standard Solution 10000 mg/l Ca	100 ml
2503.2	Calcium ICP Standard Solution 10000 mg/l Ca	500 ml
2408.1	Cerium ICP Standard Solution 1000 mg/l Ce	100 ml
2504.1	Cerium ICP Standard Solution 10000 mg/l Ce	100 ml
2409.1	Chromium ICP Standard Solution 1000 mg/l Cr	100 ml
2409.2	Chromium ICP Standard Solution 1000 mg/l Cr	500 ml
2505.1	Chromium ICP Standard Solution 10000 mg/l Cr	100 ml
2505.2	Chromium ICP Standard Solution 10000 mg/l Cr	500 ml
2410.1	Cobalt ICP Standard Solution 1000 mg/l Co	100 ml
2506.1	Cobalt ICP Standard Solution 10000 mg/l Co	100 ml
2426.1	Copper ICP Standard Solution 1000 mg/l Cu	100 ml



## PRODUCT OFFERING

PRODUCT CODE	ITEM NAME	PACK SIZE
2520.1	Copper ICP Standard Solution 10000 mg/l Cu	100 ml
2411.1	Dysprosium ICP Standard Solution 1000 mg/l Dy	100 ml
2507.1	Dysprosium ICP Standard Solution 10000 mg/l Dy	100 ml
2413.1	Erbium ICP Standard Solution 1000 mg/l Er	100 ml
2509.1	Erbium ICP Standard Solution 10000 mg/l Er	100 ml
2414.1	Europium ICP Standard Solution 1000 mg/l Eu	100 ml
2510.1	Europium ICP Standard Solution 10000 mg/l Eu	100 ml
2416.1	Gadolinium ICP Standard Solution 1000 mg/l Gd	100 ml
2511.1	Gadolinium ICP Standard Solution 10000 mg/l Gd	100 ml
2418.1	Gallium ICP Standard Solution 1000 mg/l Ga	100 ml
2512.1	Gallium ICP Standard Solution 10000 mg/l Ga	100 ml
2419.1	Germanium ICP Standard Solution 1000 mg/l Ge	100 ml
2513.1	Germanium ICP Standard Solution 10000 mg/l Ge	100 ml
2420.1	Gold ICP Standard Solution 1000 mg/l Au	100 ml
2514.1	Gold ICP Standard Solution 10000 mg/l Au	100 ml
2421.1	Hafnium ICP Standard Solution 1000 mg/l Hf	100 ml
2515.1	Hafnium ICP Standard Solution 10000 mg/l Hf	100 ml
2422.1	Holmium ICP Standard Solution 1000 mg/l Ho	100 ml
2516.1	Holmium ICP Standard Solution 10000 mg/l Ho	100 ml
2647.1	ICP Multi-Element Standard Solution 22 elements in 5 % HNO <sub>3</sub> , 1mg/l	100 ml
2648.1	ICP Multi-Element Standard Solution 22 elements in 5% HNO <sub>3</sub> , 100 mg/l	100 ml
2649.1	ICP Multi-Element Standard Solution 28 elements in 2 % HNO <sub>3</sub> , 1mg/l	100 ml
2650.1	ICP Multi-Element Standard Solution 28 elements in 5 % HNO <sub>3</sub> , 100 mg/l	100 ml
9987.1	ICP Multi-Element Standard Solution 9 elements in 5 % nitric acid, 1000 mg/l	100 ml
8248.1	ICP Multi-Element Standard Solution A 24 elements in 5 % nitric acid	100 ml
8249.1	ICP Multi-Element Standard Solution B 25 elements in 5 % nitric acid	100 ml
2636.1	ICP Multi-Element Standard Solution I 19 elements in 5 % nitric acid	100 ml
2637.1	ICP Multi-Element Standard Solution III 4 elements in 2 % HNO <sub>3</sub> , 1000 mg/l	100 ml
2638.1	ICP Multi-Element Standard Solution IV 23 elements in diluted HNO <sub>3</sub> , 1000 mg/l	100 ml
2640.1	ICP Multi-Element Standard Solution IX 9 elements in 2 % HNO <sub>3</sub> , 100 mg/l	100 ml
2639.1	ICP Multi-Element Standard Solution VIII 24 elements in 2 % HNO <sub>3</sub> , 100 mg/l	100 ml
2642.1	ICP Multi-Element Standard Solution X 23 elements in 2 % nitric acid	100 ml
2643.1	ICP Multi-Element Standard Solution XI 7 elements in 2 % nitric acid	100 ml
2644.1	ICP Multi-Element Standard Solution XIII 15 elements in 2 % nitric acid	100 ml
2645.1	ICP Multi-Element Standard Solution XVI 21 elements in 2 % HNO <sub>3</sub> , 100 mg/l	100 ml
2646.1	ICP Multi-Element Standard Solution XVII 7 elements in hydrochloric acid 15%	100 ml
409.1	ICP-MS Calibration Standard Solution 5 elements in 2 % HNO <sub>3</sub> - 1000 mg/l	100 ml
409.2	ICP-MS Calibration Standard Solution 5 elements in 2 % HNO <sub>3</sub> - 1000 mg/l	500 ml
6816.1	ICP-MS Calibration Standard Solution 8 elements in 2% HNO <sub>3</sub> + 0,1% HF, 10 mg/l	100 ml
6816.2	ICP-MS Calibration Standard Solution 8 elements in 2% HNO <sub>3</sub> + 0,1% HF, 10 mg/l	500 ml
6808.1	ICP-MS Interference Check Sol. A - 6020 12 elements in 2 % HNO <sub>3</sub>	100 ml
6808.2	ICP-MS Interference Check Sol. A - 6020 12 elements in 2 % HNO <sub>3</sub>	500 ml
429.1	ICP-MS Multi-Element Standard Solution 10 elements in 10 % HCl + 1% HF - 10mg/l	100 ml
6815.1	ICP-MS Multi-Element Standard Solution 10 elements in 2 % hydrochloric acid	100 ml
6815.2	ICP-MS Multi-Element Standard Solution 10 elements in 2 % hydrochloric acid	500 ml
6810.1	ICP-MS Multi-Element Standard Solution 12 elements in 2 % HNO <sub>3</sub>	100 ml
6810.2	ICP-MS Multi-Element Standard Solution 12 elements in 2 % HNO <sub>3</sub>	500 ml
416.1	ICP-MS Multi-Element Standard Solution 16 elements in 5 % HNO <sub>3</sub> - 10 mg/l	100 ml

## PRODUCT OFFERING

PRODUCT CODE	ITEM NAME	PACK SIZE
416.2	ICP-MS Multi-Element Standard Solution 16 elements in 5 % HNO <sub>3</sub> - 10 mg/l	500 ml
6811.1	ICP-MS Multi-Element Standard Solution 21 elements in 5 % nitric acid - 100mg/l	100 ml
383.1	ICP-MS Multi-Element Standard Solution 22 elements in 2 % HNO <sub>3</sub>	100 ml
383.2	ICP-MS Multi-Element Standard Solution 22 elements in 2 % HNO <sub>3</sub>	500 ml
6813.1	ICP-MS Multi-Element Standard Solution 27 elements in 2 % nitric acid	100 ml
6813.2	ICP-MS Multi-Element Standard Solution 27 elements in 2 % nitric acid	500 ml
6802.1	ICP-MS Multi-Element Standard Solution 28 elements in 5 % HNO <sub>3</sub> - 10 mg/l	100 ml
381.1	ICP-MS Multi-Element Standard Solution 3 elements in 2 % HNO <sub>3</sub>	100 ml
381.2	ICP-MS Multi-Element Standard Solution 3 elements in 2 % HNO <sub>3</sub>	500 ml
6803.1	ICP-MS Multi-Element Standard Solution 4 elements in 2 % HNO <sub>3</sub> - 1000 mg/l	100 ml
6807.1	ICP-MS Multi-Element Standard Solution 4 elements in 2% HNO <sub>3</sub> + 0,1% HF, 10 mg/l	100 ml
6807.2	ICP-MS Multi-Element Standard Solution 4 elements in 2% HNO <sub>3</sub> + 0,1% HF, 10 mg/l	500 ml
6814.1	ICP-MS Multi-Element Standard Solution 8 elements in 2 % nitric acid	100 ml
6814.2	ICP-MS Multi-Element Standard Solution 8 elements in 2 % nitric acid	500 ml
6819.1	ICP-MS Tuning Solution 5 elements in 2 % HNO <sub>3</sub> - 10 mg/l	100 ml
6806.1	ICP-MS Tuning Solution 6 elements in 2 % HNO <sub>3</sub> - 1 µg/l	100 ml
6806.2	ICP-MS Tuning Solution 6 elements in 2 % HNO <sub>3</sub> - 1 µg/l	500 ml
900.1	ICP-MS Tuning Solution A 6 elements in 1 % nitric acid	100 ml
900.2	ICP-MS Tuning Solution A 6 elements in 1 % nitric acid	250 ml
902.1	ICP-MS Tuning Solution B 6 elements in 1 % nitric acid	100 ml
2423.1	Indium ICP Standard Solution 1000 mg/l In	100 ml
2517.1	Indium ICP Standard Solution 10000 mg/l In	100 ml
2424.1	Iridium ICP Standard Solution 1000 mg/l Ir	100 ml
2518.1	Iridium ICP Standard Solution 10000 mg/l Ir	100 ml
2412.1	Iron ICP Standard Solution 1000 mg/l Fe	100 ml
2412.2	Iron ICP Standard Solution 1000 mg/l Fe	500 ml
2508.1	Iron ICP Standard Solution 10000 mg/l Fe	100 ml
2508.2	Iron ICP Standard Solution 10000 mg/l Fe	500 ml
2427.1	Lanthanum ICP Standard Solution 1000 mg/l La	100 ml
2521.1	Lanthanum ICP Standard Solution 10000 mg/l La	100 ml
2403.1	Lead ICP Standard Solution 1000 mg/l Pb	100 ml
2499.1	Lead ICP Standard Solution 10000 mg/l Pb	100 ml



## OUR BRANDS & PRODUCTS



*A leading innovator of filtration solutions*

Cobetter is the specialist of membrane technology application and R&D

### MicroDisc® Membrane Filter

MicroDisc® Sterile, Individually packed, gridded membrane filters are widely used in the food, beverage, pharmaceutical industries for microbiology analysis of water and other liquids.

## FEATURES

- Sterile, individually packed
- A range of membrane pore sizes are available to meet wide variety of applications
- Consistent performance
- Lot traceability

### Specifications

Membrane Material	Mixed Cellulose Ester or Cellulose Nitrate
Filter Diameter	47mm
Filter Surface	Gridded / Plain
Filter Color	White / Black
Sterility	Sterile
Pore Size	0.22 / 0.45 / 0.8µm

## PRODUCT OFFERING

CODE NO.	COLOR	PORE SIZE (um)	DIAMETER (mm)	GRID/ PLAIN	MEMBRANE	UNIT
SMFLGMC470045	Black	0.45	47	Gridded	MCE	100pcs/pk
SMFLGMC470080	Black	0.8	47	Gridded	MCE	
SMFWGCN470045	White	0.45	47	Gridded	Cellulose Nitrate	
SMFWGMC470022	White	0.22	47	Gridded	MCE	
SMFWGMC470045	White	0.45	47	Gridded	MCE	

# OUR BRANDS & PRODUCTS





## OUR BRANDS & PRODUCTS



*The smart choice for your chemicals*

Labsolv high purity chemicals offer the best combination of quality and competitive price

### Acetonitrile, HPLC

CH <sub>3</sub> CN	FW. 41.05	Density 1 L =	0.786 Kg.
CAS-No.	75-05-8	Melting Point	-45.7 C°
Boiling Point	81.6 C°		

#### Acetonitrile, HPLC

Code 03S0002

Description	Specifications				
Assay (by GC.)	99.9%	min.	205 nm	0.04	AU max.
Color (APHA)	10	max.	200 nm	0.05	AU max.
Water (by Coulometry)	0.02%	max.	195 nm	0.15	AU max.
Acidity (mEq./g.)	0.0005	max.	Gradient Specification		
Alkalinity (mEq./g.)	0.0002	max.	at 210 nm	2.0	mAU max.
Residue on Evaporation	0.0002%	max.	at 254 nm	0.5	mAU max.
UV Absorbance			Fluorescence (as quinine)		
254 nm	0.005	AU max.	at 254 nm	1	ppb max.
220 nm	0.01	AU max.	at 365 nm	1	ppb max.
210 nm	0.03	AU max.	Product passed through 0.2 micron final filter.		

Cat No.	Package	Size
03S0002103	Glass	2.5 Litre

Cat No.	Package	Size
03S0002104	Glass	4 Litre

### Hexanes, ACS

C <sub>6</sub> H <sub>14</sub>	FW. 86.18	Density 1 L =	0.660 Kg.
CAS-No.	110-54-3	Melting Point	-94.3 C°
Boiling Point	69 C°		

#### Hexanes, ACS

Code 02S0012

Description	Specifications			
Assay (by GC. : Total C <sub>6</sub> Isomers)	98.5%	min.	Thiophene	Passes test
Color (APHA)	10	max.	Substances darkened by sulfuric acid	Passes test
Water (by Coulometry)	0.03%	max.	Total Isomer : n-Hexane, Methylpentane, Methylcyclopentane and Dimethylbutane.	
Acidity (mEq./g.)	0.0003	max.	Meet A.C.S. Specifications.	
Residue on Evaporation	0.001%	max.		
Sulfur Compounds (as S)	0.005%	max.		

Cat No.	Package	Size
02S0012103	Glass	2.5 Litre

Cat No.	Package	Size
02S0012104	Glass	4 Litre

## Methanol, ACS

CH <sub>3</sub> OH	FW. 32.04	Density 1 L =	0.790 Kg.
CAS-No.	67-56-1	Melting Point	-98 C°
Boiling Point	64.5 C°		

### Methanol, ACS

Code 02S0014

#### Description

#### Specifications

Assay (by GC.)	99.8%	min.	Acetone	0.001%	max.
Appearance	Clear		Formaldehyde	0.001%	max.
Color (APHA)	10	max.	Solubility in water	Passes test	
Water (by Coulometry)	0.1%	max.	Substances darkened by sulfuric acid	Passes test	
Acidity (mEq./g.)	0.0003	max.	Substances reducing permanganate	Passes test	
Alkalinity (mEq./g.)	0.0002	max.	Meet A.C.S. Specifications.		
Residue on Evaporation	0.001%	max.			
Acetaldehyde	0.001%	max.			

#### Cat No.

#### Package

#### Size

02S0014104	Glass	4 Litre
------------	-------	---------

#### Cat No.

#### Package

#### Size

02S0014204	Plastic	4 Litre
------------	---------	---------

## Methanol, HPLC

CH <sub>3</sub> OH	FW. 32.04	Density 1 L =	0.790 Kg.
CAS-No.	67-56-1	Melting Point	-98 C°
Boiling Point	64.5 C°		

### Methanol, HPLC

Code 03S0014

#### Description

#### Specifications

Assay (by GC.)	99.9%	min.	230 nm	0.15	AU max.
Color (APHA)	10	max.	220 nm	0.25	AU max.
Water (by Coulometry)	0.05%	max.	Gradient Specification		
Acidity (mEq./g.)	0.0005	max.	at 254 nm	2.0	mAU max.
Alkalinity (mEq./g.)	0.0002	max.	Fluorescence (as quinine)		
Residue on Evaporation	0.0003%	max.	at 254 nm	1	ppb max.
Carbonyl Compound	0.001%	max.	at 365 nm	1	ppb max.
UV Absorbance			Product passed through 0.2 micron final filter.		
280 nm	0.01	AU max.			
254 nm	0.02	AU max.			

#### Cat No.

#### Package

#### Size

03S0014103	Glass	2.5 Litre
------------	-------	-----------

#### Cat No.

#### Package

#### Size

03S0014104	Glass	4 Litre
------------	-------	---------

## Petroleum Ether 35-60, ACS

CAS-No. 64742-49-0 Density 1 L = 0.640 Kg.  
Boiling Point 35-60 C°

### Petroleum Ether 35-60, ACS

Code 02S0015

Description	Specifications
Water (by Coulometry)	0.02% max.
Color (APHA)	10 max.
Appearance	Clear liquid
Acidity	Passes test
Residue on Evaporation	0.001% max.
Boiling range (°C)	35-60
Sulfur Compounds (as S)	0.005% max.
Substances darkened by sulfuric acid	Passes test
Meet A.C.S. Specifications.	

Cat No.	Package	Size
02S0015103	Glass	2.5 Litre

Cat No.	Package	Size
02S0015104	Glass	4 Litre

## Propan-2-ol, ACS

(CH<sub>3</sub>)<sub>2</sub>CHOH FW. 60.10 Density 1 L = 0.786 Kg.  
CAS-No. 67-63-0 Melting Point -89.5 C°  
Boiling Point 82.4 C°

### Propan-2-ol, ACS

Code 02S0017

Description	Specifications
Assay (by GC.)	99.5% min.
Appearance	Clear
Color (APHA)	10 max.
Water (by Coulometry)	0.2% max.
Acidity (mEq./g.)	0.0001 max.
Residue on Evaporation	0.001% max.
Carbonyl Compounds (as propionaldehyde or acetone)	0.002% max.
Solubility in water	Passes test
Meet A.C.S. Specifications.	

Cat No.	Package	Size
02S0017104	Glass	4 Litre

Cat No.	Package	Size
02S0017204	Plastic	4 Litre





## OUR BRANDS & PRODUCTS

# NEWSTAR 新星

*The company of special paper*, With strong and unique technology in paper-making, Newstar produces special papers like: qualitative and quantitative filter paper, chromatographic filter paper, pH test paper, lens cleaning tissue...

### Qualitative Filter Paper-Standard Grade



NEWSTAR qualitative filter papers are particularly suited for general laboratory filtrations to determine and identify materials. NEWSTAR qualitative filter papers containing nearly 100% high alpha-cellulose are produced under tightly controlled manufacturing condition. The average ash content is less than 0.15%. The speed of filtration and particle retention depends on the particular grade of qualitative filter paper.

### Applications

- Qualitative analysis pretreatment;
- Filtration of precipitates, such as ferric hydroxide, lead sulphate, calcium carbonate;
- Seed testing and soil analysis.

SPECIFICATION	GRADE	SPEED	PARTICLE RETENTION $\mu\text{m}$	FLOW RATE <sup>①</sup> s	THICKNESS mm	BASIS WEIGHT $\text{g}/\text{m}^2$	WET BURST <sup>②</sup> mm H <sub>2</sub> O	ASH < %
	1	Medium	11	40-50	0.18	87	260	0.15
	2	Medium	8	55-60	0.21	103	290	0.15
	3	Medium-slow	6	80-90	0.38	187	350	0.15
	4	Very fast	20-25	15-20	0.21	97	260	0.15
	5	Very slow	2.5	250-300	0.19	99	350	0.15
	6	Slow	3	90-100	0.18	102	350	0.15

① Filtration speed is the time for filtering 10ml (23±1 °C) distilled water through 10cm<sup>2</sup> filter paper. ② Wet Bursting Strength is measured by wet bursting strength instrument LSY-100

## PRODUCT OFFERING

CODE NO.	DESCRIPTION	SIZE (mm)	UNIT
NS1001-070	Grade 1 Qualitative Filter Paper Standard Grade, circle	70	100pcs/pk
NS1001-090	Grade 1 Qualitative Filter Paper Standard Grade, circle	90	
NS1001-110	Grade 1 Qualitative Filter Paper Standard Grade, circle	110	
NS1001-125	Grade 1 Qualitative Filter Paper Standard Grade, circle	125	
NS1001-150	Grade 1 Qualitative Filter Paper Standard Grade, circle	150	
NS1002-090	Grade 2 Qualitative Filter Paper Standard Grade, circle	90	
NS1002-110	Grade 2 Qualitative Filter Paper Standard Grade, circle	110	
NS1002-125	Grade 2 Qualitative Filter Paper Standard Grade, circle	125	
NS1004-090	Grade 4 Qualitative Filter Paper Standard Grade, circle	90	
NS1004-110	Grade 4 Qualitative Filter Paper Standard Grade, circle	110	
NS1004-125	Grade 4 Qualitative Filter Paper Standard Grade, circle	125	
NS1004-150	Grade 4 Qualitative Filter Paper Standard Grade, circle	150	
NS1005-110	Grade 5 Qualitative Filter Paper Standard Grade, circle	110	
NS1005-125	Grade 5 Qualitative Filter Paper Standard Grade, circle	125	
NS1005-150	Grade 5 Qualitative Filter Paper Standard Grade, circle	150	
NS1006-110	Grade 5 Qualitative Filter Paper Standard Grade, circle	110	

## Quantitative Filter Paper-Ashless Grades (Ash<0.01%)



NEWSTAR quantitative filters are designed for gravimetric analysis and the preparation of samples for instrumental analysis. They are very pure filters ideal for a wide range of critical analytical filtration procedures with maximum 0.01% ash.

### Applications

- Precise quantitative analysis;
- Liquid purification;
- Analysis of separation air or water.

SPECIFICATION	GRADE	SPEED	PARTICLE RETENTION $\mu\text{m}$	FLOW RATE <sup>①</sup> s	THICKNESS mm	BASIS WEIGHT $\text{g/m}^2$	WET BURST <sup>②</sup> mm H <sub>2</sub> O	ASH< %
	40	Medium	8	80-90	0.21	95	280	0.01
	41	Fast	20	20-30	0.22	85	280	0.01
	42	Slow	2.5	200-240	0.2	100	280	0.01
	43	Medium- fast	16	40-60	0.22	95	280	0.01
	44	Medium- slow	3	150-180	0.18	77	280	0.01

① Filtration speed is the time for filtering 10ml (23±1°C) distilled water through 10cm<sup>2</sup> filter paper. ② Wet Bursting Strength is measured by wet bursting strength instrument LSY-100.

## PRODUCT OFFERING

CODE NO.	DESCRIPTION	SIZE (mm)	UNIT
NS1440-090	Grade 40 Ashless Quantitative Filter Paper, circle	90	100pcs/pk
NS1440-110	Grade 40 Ashless Quantitative Filter Paper, circle	110	
NS1440-125	Grade 40 Ashless Quantitative Filter Paper, circle	125	
NS1441-090	Grade 41 Ashless Quantitative Filter Paper, circle	90	
NS1441-110	Grade 41 Ashless Quantitative Filter Paper, circle	110	
NS1441-125	Grade 41 Ashless Quantitative Filter Paper, circle	125	
NS1442-090	Grade 42 Ashless Quantitative Filter Paper, circle	90	
NS1442-110	Grade 42 Ashless Quantitative Filter Paper, circle	110	
NS1442-125	Grade 42 Ashless Quantitative Filter Paper, circle	125	

## pH Indicator Papers

pH indicator papers have been on the market for decades and are the appreciated standard for many applications. NEWSTAR pH indicator papers make it easy to measure pH value without the use of any instruments. For each pH value, NEWSTAR pH indicator papers show a single color which can be matched with the color scale at intervals of 0.2–1 pH unit.

Universal indicator papers have been impregnated with a mixture of several indicators. Universal indicator papers with four different segments are plastic support strips. The resulting combination of color differences gives an extremely clear and accurate pH value. The booklet format is particularly suitable for industrial and educational use as it is economical.

### Advantages

- Quick and easy method without sample preparation
- Brilliant color scales ensure reliable results
- Inexpensive

## PRODUCT OFFERING

CODE NO.	pH RANGE	DESCRIPTION	SIZE	UNIT
NS400014F	0-14	pH paper universal indicator 4 colors range 0-14 100 Strips/Plastic Box	5mm×76mm	4 different segments, 100 strips/ box
NSPH014-100P	0-14	pH paper range 0-14 100 Strips/Plastic box	9mm×70mm	5 booklets of 20 strips

## Lens Cleaning Tissue



Lens Cleaning Tissues provide a solution to safely remove moisture and grease from lenses or optical surfaces. Soft texture will not damage lenses or optical surfaces and leaves no fibers. High absorbency leads to increased safety upon removal of surface moisture and grease.

## PRODUCT OFFERING

CODE NO.	DESCRIPTION	BASIS WEIGHT (g/m <sup>2</sup> )	SIZE	UNIT
NSLCT001	Len Cleaning Tissue	11 ± 2	10X15 cm	100sheets/pk



## OUR BRANDS & PRODUCTS



*Your partner for laboratory glassware & plasticware,*  
RW covers all your glassware & plasticware needs with beakers,  
wash bottles, centrifuge tubes...





# RSAC

RCI SYSTEMS & ADVANCED CHEMICALS



***Product catalogue 2021***



## About Us

- **RSAC is a 100% owned by RCI Labscan**

RCI Labscan is a premium manufacturer and supplier of high purity acids and solvents.

- **RSAC is specialised in the Electronic and Solar PV Industries**

### A Strategic location



Laem Chabang port

20 km



Bangkok

130 km



Suvarnabhumi Int. Airport

100 km

## Vision & Mission

- **Vision**

To be the quality leader in terms of Safety, Trusted Quality and Reliable Service.

- **Mission**

To be Asia Pacific's leading Quality Chemical and Related Products Supplier for the Solar PV Industry and High Technology Industries.

## Keys to our Success



### PRODUCTION

- Reliable & consistent high quality products
- Excellent container technology to keep chemicals at the best levels



### ANALYSIS

- Analytical expertise to ensure excellent & consistent quality
- Ultra modern Lab equipment



### LOGISTICS&SERVICE

- Reliable service
- Strong focus on customers satisfaction
- Safety is our priority
- Wide range of packaging



### TREATMENT

- Management of used materials
- Collaboration with waste suppliers and customers

# Products Offering

## ● *HF Chemical*

Quality level: UP, EL

Packaging capability: ISO Container, IBC, 55 Gal Drum

Notes: Local Trans-filling & Re-packaging

## ● *HNO<sub>3</sub> Chemical*

Quality level: UP, EL

Packaging capability: ISO Container, IBC, 55 Gal Drum

Notes: Local Purification, Packaging

## ● *HCL Chemical*

Quality level: UP, EL

Packaging capability: ISO Container, IBC, 55 Gal Drum

Notes: Local Purification, Packaging

## ● *KOH Chemical*

Quality level: EL

Packaging capability: ISO Container, IBC, 55 Gal Drum

Notes: Local Purification, Packaging

## ● *NaOH Chemical*

Quality level: EL

Packaging capability: IBC, 55 Gal Drum

Notes: Local Purification, Packaging

## ● *POCL<sub>3</sub> Chemical*

Packaging capability: 1.6 kg & 2.5 kg Bubbler

Notes: Packaging Recycling used

## ● *TMA Chemical*

Packaging capability: 14.2 kg, 72 kg & 300 kg canister

Notes: Packaging Recycling used

## ● *DEC Chemical*

Packaging capability: 1.5 L

Notes: Packaging Recycling used





## Quality Management

*Quality management* is an integral part of our daily work. Our goal is to provide the best satisfaction to all our customers by implementing the most efficient processes and work on a continuous improvement.

*Our safety and health programmes* take into consideration the health factors which impact our employees, contractors, their families and our community.

With our strong commitment to quality as well as our capabilities and experience in Quality Control, *our customers are assured of Excellent and Consistent Quality.*

## Contact Details



**Address:**

168/5 Moo 4, Tambon Bowin,  
Amphur Sriracha,  
Chonburi 20230, Thailand



**Phone:**

+65 (0) 9424 7479



**Email:**

spencer@rcilabscan.com





Distributor:

