

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

|              |   |
|--------------|---|
| Product name | ACETONE   |
| CAS-No.      | 67-64-1   |
| Product code | AR1003, BP1003, EP1003, GP1003, IR1003, LC1003, LC1004, LV1003, PC1003, PS1003, RP1003, SM1003, XP1003, XP1003S, VL1003 |

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

|                 |                                      |
|-----------------|--------------------------------------|
| Identified uses | Chemical for analysis and production |
|-----------------|--------------------------------------|

**1.3 Details of the supplier of the safety data sheet**

|                  |   |
|------------------|---|
| Company          | RCI LABSCAN LIMITED.<br>24 Rama 1 Road, Pathumwan, Bangkok 10330 Thailand |
| Telephone number | (662) 613-7911-4  |
| Fax number       | (662) 613-7915  |

**1.4 Emergency Telephone Number**

|                 |                  |
|-----------------|------------------|
| Emergency phone | (662) 613-7911-4 |
|-----------------|------------------|

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Flammable liquids (Category 2), H225  
 Eye irritation (Category 2), H319  
 Specific target organ toxicity - single exposure (Category 3), H336  
 For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2 Label elements**

**Labelling according Regulation (EC) No 1272/2008**

Pictogram



|             |        |
|-------------|--------|
| Signal word | Danger |
|-------------|--------|

|                     |  |
|---------------------|--|
| Hazard statement(s) | Highly flammable liquid and vapour.<br>Causes serious eye irritation.<br>May cause drowsiness or dizziness.<br>Repeated exposure may cause skin dryness or cracking. |
| H225                |  |
| H319                |  |
| H336                |  |
| EUH066              |  |

|                            |   |
|----------------------------|---|
| Precautionary statement(s) | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>Keep container tightly closed.<br>Ground and bond container and receiving equipment.<br>Use non-sparking tools. |
| P210                       |   |
| P233                       |   |
| P240                       |   |
| P242                       |   |

|                    |  |
|--------------------|--|
| P243               | Take action to prevent static discharges.  |
| P261               | Avoid breathing fume/gas/mist/vapours/spray.   |
| P264               | Wash hand thoroughly after handling.   |
| P271               | Use only outdoors or in a well-ventilated area.  |
| P280               | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].                         |
| P304 + P340        | IF INHALED: Remove person to fresh air and keep comfortable for breathing.   |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P319               | Get medical help if you feel unwell.   |
| P337 + P317        | If eye irritation persists: Get medical help.  |
| P403 + P235        | Store in a well-ventilated place. Keep cool.   |
| P405               | Store locked up.   |

**2.3 Other hazards** None

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms 2-Propanone, Dimethyl ketone,  $\beta$ -Keto-propane

| CAS-No  | EC-No     | EC-Index-No  | Formula                           | Molecular Weight | Weight % |
|---------|-----------|--------------|-----------------------------------|------------------|----------|
| 67-64-1 | 200-662-2 | 606-001-00-8 | CH <sub>3</sub> COCH <sub>3</sub> | 58.08 g/mol      | <=100    |

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component   | Concentration | Classification   |
|---|---------------|--|
| <b>Acetone</b>  |               |  |
| CAS-No 67-64-1<br>EC-No 200-662-2<br>EC-Index-No 606-001-00-8 | <=100%        | Flammable liquids (Category 2), H225<br>Eye irritation (Category 2), H319<br>Specific target organ toxicity - single exposure (Category 3), H336 |

For the full text of the H-Statements mentioned in this Section, see Section 16

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

|                |   |
|----------------|---|
| General advice | Show this safety data sheet to the doctor in attendance.  |
| Inhalation     | Move to fresh air in case of accidental inhalation of vapors. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus.   |
| Skin contact   | Remove contaminated clothing and wash affected skin with soap and water. Obtain medical attention. If signs of poisoning appear, treat as for inhalation. Wash contaminated clothing before reuse. Contaminated combustible material, e.g. clothing ignites more readily and burns fiercely.  |
| Eye contact    | If the substance has got into the eyes, immediately wash out with plenty of water at least 15 minutes. Obtain medical attention.  |
| Ingestion      | Rinse mouth. Do not induce vomiting. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus. Obtain medical attention. Never give anything by mouth to an unconscious person. |

#### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2.2 and section 11.

#### 4.3 Indication of any immediate medical attention and special treatment needed

After swallowing: immediately make victim drink plenty of water. Subsequently administer: Activate charcoal 20-40 g in 10% slurry. Laxative: Sodium Sulfate 1 tablespoon/250 ml of water. No milk, No castor oil, No alcohol. Indications for the doctor: Gastric lavage.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Extinguish with carbon dioxide, dry chemical, foam or water spray. In the event of fire, cool tanks with water spray.

#### 5.2 Special hazards arising from the substance or mixture

Vapors may form explosive mixture with air at ambient temperature. Flash back possible over considerable distance.

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

#### 5.4 Further information

Standard procedure for chemical fires. Take measures to prevent electrostatic charging. Prevent firefighting water from entering surface water or groundwater.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Do not breathe vapors or spray mist. Remove all sources of ignition. Wear a positive-pressure supplied-air respirator, flame retardant antistatic protective clothing. Shut off leaks if without risk. Keep people away from and upwind of spill/leak.

#### 6.2 Environmental precautions

Contain or absorb leaking liquid with sand or earth, consults an expert. Prevent liquid entering sewers, basements and workpits. If substance has entered a water course or sewer or contaminated soil, advise police.

#### 6.3 Methods and materials for containment and cleaning up

Spillage: May react with combustible substances creating fire or explosion hazard and formation of toxic fumes. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Soak up with inert absorbent material (e.g. sand, silica gel or chemical absorbent pads). Prevent liquid entering sewers, basements and workpits; vapor may create explosive atmosphere. Transfer to covered steel drums. Dispose of promptly.

#### 6.4 Reference to other sections

For disposal see **Section 13**.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Keep container tightly closed. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. Do not empty into drains.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Keep out of direct sunlight and away from incompatible materials. Store in original container. Electrical equipment should be protected to the appropriate standard.

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

# SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters

### Derived No Effect Level (DNEL)

| Application Area | Health Effects             | Exposure     | Value                  |
|------------------|----------------------------|--------------|------------------------|
| Worker           | Acute Local effects        | Inhalation   | 2420 mg/m <sup>3</sup> |
| Worker           | Long-term Systemic effects | Inhalation   | 1210 mg/m <sup>3</sup> |
| Worker           | Long-term Systemic effects | Skin contact | 186 mg/kg Body weight  |
| Consumer         | Long-term Systemic effects | Skin contact | 62 mg/kg Body weight   |
| Consumer         | Long-term Systemic effects | Inhalation   | 200 mg/m <sup>3</sup>  |
| Consumer         | Long-term Systemic effects | Ingestion    | 62 mg/kg Body weight   |

### Predicted No Effect Concentration (PNEC)

| Compartment            | Value      |
|------------------------|------------|
| Fresh water            | 10.6 mg/l  |
| Fresh water sediment   | 30.4 mg/kg |
| Marine water           | 1.06 mg/l  |
| Marine sediment        | 3.04 mg/kg |
| Sewage treatment plant | 100 mg/l   |
| Soil                   | 29.5 mg/kg |

## 8.2 Exposure controls

### Appropriate engineering controls

The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Ventilation hoods and fans required when working with organic solvents or in hot melt applications.

### Individual protection measures (Personal protective equipment, PPE)

#### Eye/face protection

Goggles giving complete protection to eyes.

#### Skin protection

Chemical resistant apron / flame retardant antistatic protective clothing, heavy duty work shoes.

Handle with gloves

- Full contact wears gloves from butyl rubber material.
- Splash contact wears gloves from natural rubber material.

The select protective gloves have to satisfy the specifications of EU Directive 89/686 EEC and standard EN 374 derived from it.

#### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Required when vapor/aerosols are generated filter AX (EN 371).

#### Environmental exposure controls

Prevent liquid entering sewers, basements and workpits

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|   |  |
|---|--|
| Appearance: Form                        | Liquid   |
| : Color                                 | Colorless  |
| Odor                                    | Characteristic   |
| Odor Threshold                          | Not Available  |
| pH                                      | 5 – 6 at 395g/l H <sub>2</sub> O                         |
| Melting point/range                     | -95.4°C  |
| Boiling point/range                     | 56.2°C   |
| Flash point                             | -20°C (closed cup)                                       |
| Evaporation rate                        | Not Available  |
| Flammability (solid, gas)               | Not Available  |
| Explosion limits: lower                 | 2.6 %(V)   |
| upper                                   | 13 %(V)  |
| Vapor Pressure                          | 233 hPa at 20°C  |
| Relative vapor density                  | 2.01   |
| Density                                 | 0.790 g/ml at 20°C                                       |
| Water solubility                        | Soluble at 20°C  |
| Partition coefficient (n-octanol/water) | log Pow: 0.24  |
| Auto-Ignition temperature               | 465°C  |
| Decomposition Temperature               | Not Available  |
| Viscosity                               | 0.33 mPa.s at 20°C                                       |
| Explosive properties                    | Not Explosive  |
| Oxidizing properties                    | The substance or mixture is not classified as oxidizing. |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Light-sensitive; sensitive to air, solvent.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Risk of explosion in contact with hydrogen peroxide, strong oxidizing agents, bromine trifluoride, difluorine dioxide, 2-methyl-1,3-butadiene ( isoprene), nitromethane, nitrosyl chloride (catalyst), nitrosyl perchlorate, peroxy monosulfuric acid.

The substance can react dangerously with alkali hydroxide, bromine, fluorine, sodium, strong oxidizing agents, strong reducing agents, nitric acid, chromosulfuric acid, chromium trioxide, chromyl chloride, ethanolamine, potassium tert- butoxide, phosphorus oxychloride, sulfur dichloride.

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

Alkali hydroxides, halogen compounds, strong oxidizing agent, peroxi compounds, halogen oxide, alkali metals, nitrosyl compounds, metals, ethanolamine, activated charcoal, chromosulfuric acid, chromy chloride, fluorine, strong reducing agent.

Unsuitable working materials are various plastics, rubber.

### 10.6 Hazardous decomposition products

Carbon monoxides, Carbon dioxides (Hazardous decomposition products from under fire condition).

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD<sub>50</sub> (oral, rat): 5800 mg/kg

LD<sub>50</sub> (dermal, rabbit): 20000 mg/kg

LC<sub>50</sub> (inhalation, rat): 76 mg/l/4 h

#### Acute oral toxicity

Symptoms: gastrointestinal complaints, headache, salivation, nausea, vomiting, dizziness, narcosis, coma.

#### Acute inhalation toxicity

Absorption: mucosal irritations, drowsiness. In high dose; headache, salivation, nausea, vomiting.

#### Skin corrosion/irritation

Absorption: Slight irritations danger of skin.

#### Serious eye damage/eye irritation

Irritations: Risk of corneal clouding

#### Respiratory or skin sensitization

Dermatitis and sensitization of susceptible persons.

#### Germ cell mutagenicity

Not Available

#### Carcinogenicity

No carcinogenic in animal experiments.

#### Reproductive toxicity

No impairment of reproductive performance in animal experiments.

#### Teratogenicity

Not Available

#### Specific target organ toxicity (STOT) - single exposure

May cause drowsiness or dizziness.

#### Specific target organ toxicity (STOT) - repeated exposure

Not Available

#### Aspiration hazard

Not Available

#### Further information

After absorption: gastrointestinal complaints, headache, salivation, nausea, vomiting, dizziness, narcosis, coma, mucosal irritations, drowsiness.

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish

LC<sub>50</sub> Rainbow trout: 5540 mg/l /96h

Toxicity to daphnia

EC<sub>50</sub> Daphnia magna: 6100 mg/l /48h

and other aquatic invertebrates

Toxicity to algae

IC<sub>5</sub> M.aeruginosa: 530 mg/l/8d

Toxicity to bacteria EC<sub>5</sub> Ps. Putida: 1700 mg/l /16d

### 12.2 Persistence and degradability

Biodegradability 91%/28 d, Readily biodegradable, according to appropriate OECD test.

### 12.3 Bioaccumulative potential

Partition coefficient (n-octanol/water) log Pow: 0.24  
No bioaccumulation is to be expected (log P o/w <1)

### 12.4 Mobility in soil

Not Available

### 12.5 Other adverse effects

Do not allow to enter waters, waste water or soil.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding law and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste or burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

#### Contaminated packaging

Disposal in compliance with official regulations. Handle contaminated packaging as hazardous waste in the same way of the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

## SECTION 14: Transport information

### Land Transport (ADR/RID)

|                              |         |
|------------------------------|---------|
| UN Number                    | 1090    |
| UN proper shipping name      | ACETONE |
| Transport hazard class(es)   | 3       |
| Packing group                | II      |
| Environmental hazards        | No      |
| Special precautions for user | Yes     |

### Sea transport (IMDG)

|                              |         |
|------------------------------|---------|
| UN Number                    | 1090    |
| UN proper shipping name      | ACETONE |
| Transport hazard class(es)   | 3       |
| Packing group                | II      |
| Marine pollutant             | No      |
| Special precautions for user | Yes     |
| EmS                          | F-E S-D |

### Air transport (IATA)

|                            |         |
|----------------------------|---------|
| UN Number                  | 1090    |
| UN proper shipping name    | ACETONE |
| Transport hazard class(es) | 3       |
| Packing group              | II      |
| Environmental hazards      | No      |

Special precautions for user No

**River transport (AND/ADNR)**  
(Not examined)

## SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or Mixture

Not Available

### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

## SECTION 16: Other information

### Full text of H-Statements referred to under sections 2 and 3

|        |   |
|--------|---|
| H225   | Highly flammable liquid and vapour.                   |
| H319   | Causes serious eye irritation.                        |
| H336   | May cause drowsiness or dizziness.                    |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

### Recommended restrictions

Take notice of labels and safety data sheets for the working. Chemicals Take necessary action to avoid static electricity discharge.

### Reference

Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Labelling according to EC Directives 67/548 EEC and Regulation (EC) No 1272/2008.

Transportation information according to Recommendations on the Transport of Dangerous Goods, Model Regulations. Twelfth revised edition. United Nations.

Institute for Occupational Safety and Health of the German Social Accident Insurance in Sankt Augustin/Germany,

Source: IFA for Databases on hazardous substances (GESTIS).

### Further information

Contact to RCI Labscan Limited.

### Revision Date

01/04/2021

---

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.