HAZARDOUS WASTE COMPATIBILITY CHART

PROCEDURES FOR USING THE CHART

1. For the binary combination of any reactivity groups, first find the RGN of the first group on the middle column of the chart
2. Find the RGN of the second group from the bottom squares
3. Find the intersecting reaction square for the two RGN

REACTIVITY CODE — CONSEQUENCE

- H — Heat Generation
- F — Fire
- G — Innocuous and non-flammable gas generation
- GT — Toxic Gas formation
- GF — Flammable Gas formation
- E — Explosion
- P — Violent Polymerization
- S — Solubilization of toxic substance
- U — May be hazardous, but Unknown

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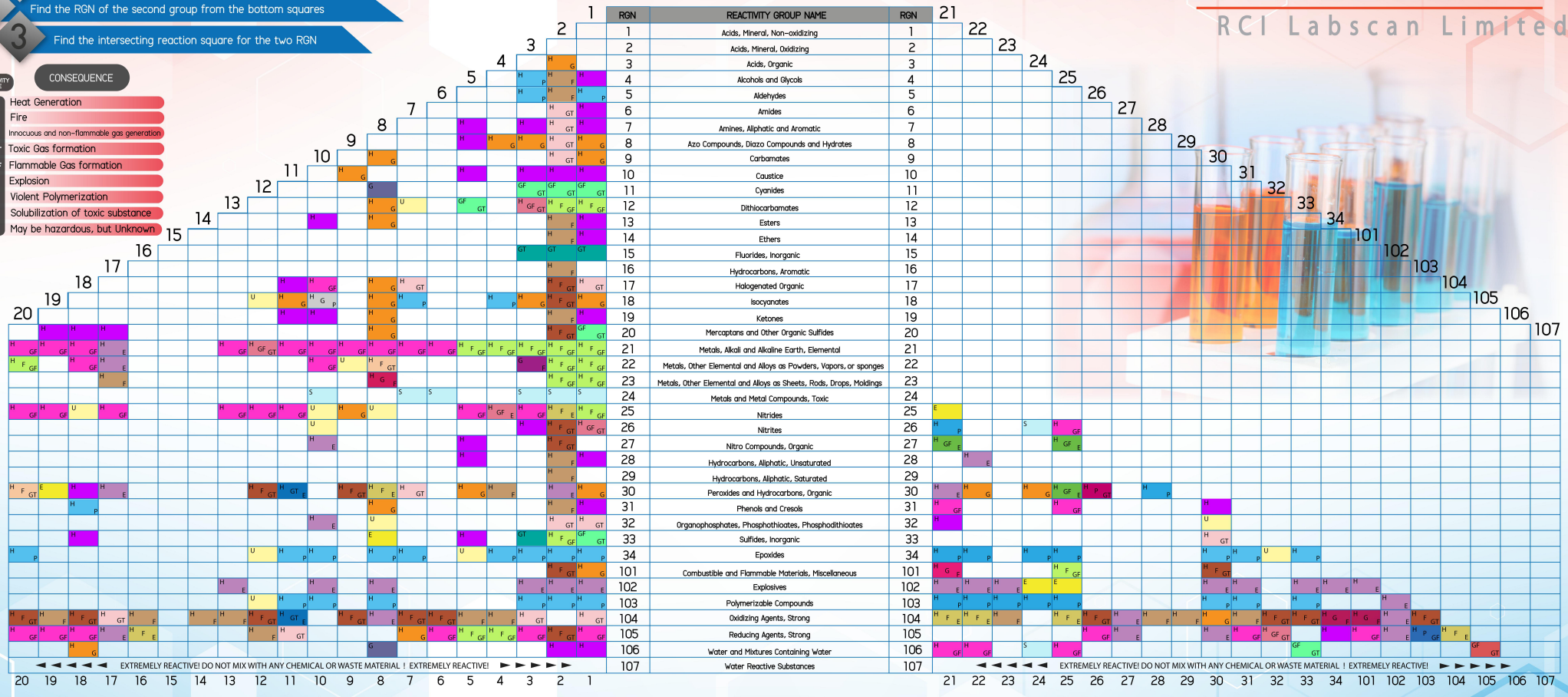

RGN	REACTIVITY GROUP NAME
1	Acids, Mineral, Non-oxidizing
2	Acids, Mineral, Oxidizing
3	Acids, Organic
4	Alcohols and Glycols
5	Aldehydes
6	Amides
7	Amines, Aliphatic and Aromatic
8	Azo Compounds, Diazo Compounds and Hydrates
9	Carbamates
10	Caustice
11	Cyanides
12	Dithiocarbamates
13	Esters
14	Ethers
15	Fluorides, Inorganic
16	Hydrocarbons, Aromatic
17	Halogenated Organic
18	Isocyanates
19	Ketones
20	Mercaptans and Other Organic Sulfides
21	Metals, Alkali and Alkaline Earth, Elemental
22	Metals, Other Elemental and Alloys as Powders, Vapors, or sponges
23	Metals, Other Elemental and Alloys as Sheets, Rods, Drops, Moldings
24	Metals and Metal Compounds, Toxic
25	Nitrides
26	Nitrites
27	Nitro Compounds, Organic
28	Hydrocarbons, Aliphatic, Unsaturated
29	Hydrocarbons, Aliphatic, Saturated
30	Peroxides and Hydrocarbons, Organic
31	Phenols and Cresols
32	Organophosphates, Phosphothioates, Phosphodithioates
33	Sulfides, Inorganic
34	Epoxides
101	Combustible and Flammable Materials, Miscellaneous
102	Explosives
103	Polymerizable Compounds
104	Oxidizing Agents, Strong
105	Reducing Agents, Strong
106	Water and Mixtures Containing Water
107	Water Reactive Substances

◄◄◄◄◄ EXTREMELY REACTIVE! DO NOT MIX WITH ANY CHEMICAL OR WASTE MATERIAL ! EXTREMELY REACTIVE! ►►►►►

Chemicals Guide	Reactivity Group Name	RGN
Acetic acid	Acids, Organic	3
Acetone	Ketones	19
Acetonitrile	Nitriles	26
Ammonium molybdate	Metals and Metal Compounds, Toxic	24
Ammonium persulfate	Oxidizing Agents, Strong	104
Ascorbic acid	Acids, Organic	3
Butan-1-ol	Alcohols and Glycols	4
n-Butyl acetate	Esters	13
Borax	Acids, Mineral, Non-oxidizing	1
Boric acid	Acids, Mineral, Non-oxidizing	1
Bromocresol green	Halogenated Organics	17
Chlorobenzene	Halogenated Organics	17
1-Chlorobutane	Halogenated Organics	17
Chloroform	Halogenated Organics	17
Cyclohexane	Hydrocarbons, Aliphatic, Saturated	29
Cyclohexanone	Ketones	19
Cylopentane	Hydrocarbons, Aliphatic, Saturated	29
Calcium Hydroxide	Caustics	10
Citric acid	Acids, Organic	3
Copper(II) sulfate	Metals and Metal Compounds, Toxic	24
1,2-Dichloroethane	Halogenated Organics	17

Chemicals Guide	Reactivity Group Name	RGN
Dichloromethane	Halogenated Organics	17
Diethyl Ether	Ethers	14
Dimethylacetamide	Amides	6
Dimethylformamide	Amides	6
1,4-Dioxan	Ethers	14
Ethanol	Alcohols and Glycols	4
Ethyl acetate	Esters	13
Ethylene glycol monobutyl ether	Alcohols and Glycols	4
	Ethers	14
Formaldehyde	Aldehydes	5
Heptane	Hydrocarbons, Aliphatic, Saturated	29
Hexane	Hydrocarbons, Aliphatic, Saturated	29
Hydrochloric acid	Acids,Mineral, Non-oxidizing	1
Hydrofluoric acid	Acids,Mineral, Non-oxidizing	1
	Fluorides, Inorganic	15
Hydrogen peroxide	Oxidizing Agents, Strong	104
Methanol	Alcohols and Glycols	4
Methyl-t-Butyl Ether	Ethers	14
Methyl ethyl ketone	Ketones	19
Methanol	Alcohols and Glycols	4
Methyl-t-Butyl Ether	Ethers	14

Chemicals Guide	Reactivity Group Name	RGN
Methyl ethyl ketone	Ketones	19
Methyl isobutyl Ketone	Ketones	19
2-Methybutane	Hydrocarbons, Aliphatic, Saturated	29
Methylcyclohexane	Hydrocarbons, Aliphatic, Saturated	29
n-Methyl-2-pyrrolidone	Amides	6
Magnesium nitrate	Oxidizing Agents, Strong	104
Malic acid	Acids, Organic	3
Malonic acid	Acids, Organic	3
Nitric acid	Acids, Mineral, Oxidizing	2
Nonane	Hydrocarbons, Aliphatic, Saturated	29
Octane	Hydrocarbons, Aliphatic, Saturated	29
Pentane	Hydrocarbons, Aliphatic, Saturated	29
Petroleum ether	Hydrocarbons, Aliphatic, Saturated	29
Ortho-Phosphoric acid	Acids,Mineral, Non-oxidizing	1
Propan-1-ol	Alcohols and Glycols	4
Propan-2-ol	Alcohols and Glycols	4
Propylene Glycol Monomethyl Ether	Alcohols and Glycols	4
	Ethers	14
Potassium Hydroxide	Caustics	10
Phosphorus oxychloride	Oxidizing Agents, Strong	104
	Water Reactive Subatances	107

Chemicals Guide	Reactivity Group Name	RGN
Potassium Nitrate	Oxidizing Agents, Strong	104
Sulfuric acid	Acids, Mineral, Oxidizing	2
	Water Reactive Subatances	107
Silver nitrate	Metals and Metal Compounds, Toxic	24
	Oxidizing Agents, Strong	104
Sodium carbonate	Caustics	10
Sodium Hydroxide	Caustics	10
Silver nitrate	Oxidizing Agents, Strong	104
Sodium nitrite	Oxidizing Agents, Strong	104
Sodium Thiosulfate	Reducing Agents, Strong	105
Tetrachloroethylene	Halogenated Organics	17
Tetrahydrofuran	Ethers	14
Toluene	Hydrocarbons, Aromatic	16
Trichloroethylene	Halogenated Organics	17
2,2,4-Trimethylpantane	Hydrocarbons, Aliphatic, Saturated	29
Trichloroacetic acid	Acids, Organic	3
	Halogenated Organics	17
Water	Water and Mixtures Containing Water	106
Xylene	Hydrocarbons, Aromatic	16
Zinc Sulfate	Metals and Metal Compounds, Toxic	24

Reference : Hatayama, H.K.; Chen J.J.; Vera de E.R.; Stephens R.D.; Storm D.L. "AMethod for Determining the Compatibility of Hazardous Wastes" California Department of Health Sevices, Berkeley, California 94704, April 1980, MPA-60/2-80-076