CHEMICAL COMPATIBILITY CHART

1	Inorganic Acids	1																							
2	Organic acids	•	2															R	Repr	eser	nts I	Uns	afe	Con	nbinatio
3	Caustics	•	•	3		_											_	_	Ċ						
4	Amines & Alkanolamines	•	•		4													T R	Repr	esei	nts :	Safe	Co	mbi	nations
5	Halogenated Compounds	•		•	•	5											_	_							
6	Alcohols, Glycols & Glycol Ethers	•					6																		
7	Aldehydes	•	•	•	•		•	7																	
8	Ketone	•		•	•			•	8																
9	Saturated Hydrocarbons									9															
10	Aromatic Hydrocarbons	•									10														
11	Olefins	•				•						11													
12	Petrolum Oils												12												
13	Esters	•		•	•									13											
14	Monomers & Polymerizable Esters	•	•	•	•	•	•								14										
15	Phenols			•	•			•							•	15									
16	Alkylene Oxides	•	•	•	•		•	•							•	•	16								
17	Cyanohydrins	•	•	•	•	•		•									•	17							
18	Nitriles	•	•	•	•												•		18						
19	Ammonia	•	•					•	•					•	•	•	•	•		19					
20	Halogens			•			•	•	•	•	•	•	•	•	•	•				•	20				
21	Ethers	•													•						•	21			
22	Phosphorus, Elemental	•	•	•																	•		22		
23	Sulphur, Molten									•	•	•	•				•						•	23	
24	Acid Anhydrides	•		•	•		•	•							•		•	•	•	•					24

Chlorosulphonic acid Hydrochloric acid (aqueous) Hydrofluoric acid (aqueous) Hydrogen chloride (anhydrous) Hydrogen fluoride (anhydrous) Nitric acid Oleum Phosphoric acid

Acetic acid Butyric acid (n-) Formic acid Propionic acid Rosin Oil Tall oil

Caustic potash solution Caustic soda solution

Aminoethylethanolamine Aniline
Diethanolamine Diethylenetriamine Diisopropanolamine Dimethylamine Ethylenediamine
Hexamethylenediamine
2-Methyl-5-ethylpyridine Monoethanolamine Monoisopropanolamine Morpholine Pyridine Triethanolamine Triethlamine
Triethylenetetramine

Trimethylamine

Allyl chloride Carbon tetrachloride Chlorobenzene Chloroform Chlorohydrines, crude Dichlorobenzene (p-) Dichlorodifluoromethane Dichloroethyl ether Dichloropropene Dichloropropene Ethyl chloride Ethylene dibromide Ethylene dichloride Methyl bromide Methyl chloride Methylene chloride Monochlorodifluoromethane Perchloroethylene

Propylene dichloride 1,2,4-Trichlorobenzene

1.1.1-Trichloroethane

Trichlorofluoromethane

Trichloroethylene

Group 6: Alcohols, Glycols and Glycol Ethers Group 7: Aldehydes

Allyl alcohol Amyl alcohol 1.4-Butanediol Butyl alcohol (iso, n, sec, tert) Butylene alycol Corn syrup
Cyclohexyl alcohol Decyl alcohol (n, iso) Dextrose solution Diacetone alcohol Diethylene glycol
Diethylene glycol dimethyl ether Diethylene glycol monobutyl ether Diethylene glycol monoethyl ether Diethylene glycol monomethyl ether

Diisobutyl carbitol Dipropylene glycol Dodecanol Ethoxylated dodecanol Ethoxylated pentadecanol Ethoxylated tetradecanol Ethoxylated tridecanol Ethoxytriglycol Ethyl alcohol

Ethyl butanol 2-Ethylbutyl alcohol 2-Ethylhexyl alcohol Ethylene glycol Ethyleneglycol monobutyl ether

Ethylene glycol monoethyl ether Ethylene glycol monomethyl ether Furfuryl alcohol

Glycerine Heptanol Hexanol Hexylene glycol Isoamyl alcohol Isooctyl alcohol Methyoxytriglycol Methyl alcohol Methylamyl alcohol Molasses, all

Nonanol

Pentadecanol Polypropylene glycol methyl ether Propyl alcohols (n, iso)

Propylene glycol Sorbitol Tetradecanol Tetraethylene glycol Tridecyl alcoho

Triethylene glycol Undecanol

Acetaldehyde Acrolein (inhibited) Butyraldehyde (n, iso) Crotonaldehyde Decaldehyde (n, iso) 2-Ethyl-3-propylacrolein Formaldehyde solutions Furfural Hexamethylenetetramine Isooctyl aldehyde Methyl butyraldehyde Methyl formal
Paraformaldehyde
Valeraldehyde

Group 8: Ketones

Acetone Acetophenone Camphor oil Cyclohexanone Diisobutyl ketone Isophorone Mesityl oxide Methyl ethyl ketone Methyl isobutyl ketone

Group 9: Saturated Hydrocarbons

Butane Cyclohexane **Ethane** Heptane Hexane Iso-butane Liquified natural gas Liquified petroleum gas Methane Nonane n- Paraffins Pentane Petrolatum Petroleum ethers Petroleum naphtha Polybutene Propane Propylene butylene polymer

Group 10: Aromatic Hydrocarbons

Benzene

Cumene p-Cymene Coal tar oil Diethylbenzene Dodecyl benzene Dowtherm Ethylbenzene Naphtha, coal tar Naphthalene (includes molten) Tetrahdyronaphthalene Toluene Triethyl benzene Xylene (m-, o-, p-)

Butylene 1-Decene Dicyclopentadiene Diisobutylene Dipentene Dodecene 1-Dodecene Ethylene Liquified petroleum gas 1-Heptene Isobutylene Nonene 1-Octene 1-Pentene

Propylene Propylene butylene polymer Propylene tetramer (dodecene) 1-Tetradecene

1-Tridecene Turpentine 1-Undecene

Polybutene

Asphalt Gasolines

CasingeadAutomotive Aviation

Jet Fuels JP-1 (kerosene) JP-3 JP-4 JP-5 (kerosene, heavy)

Kerosene Mineral spirits Naphtha (non aromatic) Naphtha.

Solvent Stoddard solvent VM&P

Absorption oil

Clarified oil

Crude oil

Diesel oil

Fuel oil No. 1 (kerosene)

No. 1-D No. 2

No. 2-D

No. 4 No. 5 No. 6

Lubricating oil Mineral oil Mineral seal oil

Motor oil

Penetration oil Range oil

Road oil

Spindle oil Spray oil

Transformer oil Turbine oil

Group 13: Esters

Amyl acetate

Amyl tallate
Butyl acetates (n, iso, sec)

Butyl benzyl phthalate Castor oil Croton oil

Dibutyl phthalate
Diethyl carbonate
Dimethyl sulfate
Dioctyl adipate
Dioctyl phthalate

Epoxidized vegetable oils Ethyl acetate

Ethyl diacetate Ethylene glycol monoethyl ether acetate Ethylhexyl tallate

Fish oil Glycol diacetate

Methyl acetate Methyl amyl acetate Neatsfoot oil

Olive oil

Peanut oil

Propyl acetates (n, iso) Resin oil

Sova bean oil Sperm oil Tallow

Tanner's oil Vegetable oil Wax, carnauba

14: Monomers and Polymerizable

Acrylic acid (inhibited) Acrylonitrile Butadiene (inhibited)
Butyl acrylate (n, iso) Ethyl acrylate (inhibited)
2-Ethylhexyl acrylate (inhibited)
Isodecyl acrylate (inhibited) Isoprene (inhibited)
Methyl acrylate (inhibited) Methyl methacrylate (inhibited) o-Propiolactone Styrene (inhibited) Vinyl acetate (inhibited)
Vinyl chloride (inhibited)

Vinylidene chloride (inhibited) Vinyl toluene

Carbolic oil Creosote, coal tar Cresols Nonylphenol Phenol

Group 16: Alkylene Oxides

Ethylene Oxide Propylene Oxide

Acetone cyanohydrin Ethylene cyanohydrin

Group 18: Nitriles

Acetonitrile Adiponitrile

Group 19: Ammonia

Ammonium hydroxide

Group 20: Halogens

Bromine Chlorine

Diethyl ether (ethyl ether) 1, 4-Dioxane Isopropyl ether Tetrahydrofuran

Group 23: Sulphur, molten

Acetic anhydride Propionic anhydride

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