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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Compatibility Chart** | | | | | | | |
| **Group** | **Name** | | | | | **Example** | **Incompatible Groups** |
| Group 1 | Inorganic Acids | | | | | Hydrochloric acid | 2,3,4,5,6,7,8,10,13,14,16,17,18,19,21,22,23 |
| Hydrofluoric acid |
| Hydrogen chloride |
| Hydrogen fluoride |
| Nitric acid |
| Sulfuric acid |
| Phosphoric acid |
| Group 2 | Organic acids | | | | | Acetic acid | 1,3,4,7,14,16,17,18,19,22 |
| Butyric acid |
| Formic acid |
| Propionic acid |
| Group 3 | Caustics | | | | | Sodium hydroxide | 1,2,6,7,8,13,14,15,16,17,18,20,23 |
| Ammonium hydroxide solution |
| Group 4 | Amines and Alkanolamines | | | | | Aminoethylethanolamine | 1,2,5,7,8,13,14,15,16,17,18,23 |
| Aniline |
| Diethanolamine |
| Diethylamine |
| Dimethylamine |
| Ethylenediamine |
| 2-Methyl-5-ethylpyridine |
| Monoethanolamine |
| Pyridine |
| Triethanolamine |
| Triethylamine |
| Triethylenetetramine |
| Group 5 | Halogenated Compounds | | | | | Allyl chloride | 1,3,4,11,14,17 |
| Carbon tetrachloride |
| Chlorobenzene |
| Chloroform |
| Methylene chloride |
| Monochlorodifluoromethane |
| 1,2,4-Trichlorobenzene |
| 1,1,1-Trichloroethane |
| Trichloroethylene |
| Trichlorofluoromethane |
| **Group** | **Name** | | | | | **Example** | **Incompatible Groups** |
| Group 6 | Alcohols | | | | | 1,4-Butanediol | 1,7,14,16,20,23 |
| Glycols | | | | | Butanol (iso, n, sec, tert) |
|  |  |  |  |  | Diethylene glycol |
| Glycol Ether | | | | | Ethyl alcohol |
| Ethyl butanol |
| Ethylene glycol |
| Furfuryl alcohol |
| Isoamyl alcohol |
| Methyl alcohol |
| Methylamyl alcohol |
| Propylene glycol |
| Group 7 | Aldehydes Acetaldehyde | | | | | Acrolein | 1,2,3,4,6,8,15,16,17,19,20,23 |
| Butyraldehyde |
| Crotonaldehyde |
| Formaldehyde |
| Furfural |
| Paraformaldehyde |
| Propionaldehyde |
| Group 8 | Ketones | | | | | Acetone | 1,3,4,7,19,20 |
| Acetophenone |
| Diisobutyl ketone |
| Methyl ethyl ketone |
| Group 9 | Saturated Hydrocarbons | | | | | Butane | 20 |
| Cyclohexane |
| Ethane |
| Heptane |
| Paraffins |
| Paraffin wax |
| Pentane |
| Petroleum ether |
| Group 10 | Aromatic Hydrocarbons | | | | | Benzene | 1,20 |
| Cumene |
| Ethyl benzene |
| Naphtha |
| Naphthalene |
| Toluene |
| Xylene |
| Group 11 | Olefins | | | | | Butylene | 1,5,20 |
| 1-Decene |
| 1-Dodecene |
| Ethylene |
| Turpentine |
| Group 12 | Petroleum Oils | | | | | Gasoline | 20 |
| Mineral Oil |
| **Group** | **Name** | | | | | **Example** | **Incompatible Groups** |
| Group 13 | Esters | | | | | Amyl acetate | 1,3,4,19,20 |
| Butyl acetates |
| Castor oil |
| Dimethyl sulfate |
| Ethyl acetate |
| Group 14 | Monomers Polymerizable Esters | | | | | Acrylic acid | 1,2,3,4,5,6,15,16,19,20,21,23 |
| Acrylonitrile |
| Butadiene |
| Acrylates |
| Group 15 | Phenols | | | | | Carbolic acid | 3,4,7,14,16,19,20 |
| Cresote |
| Cresols Phenol |
| Group 16 | Alkylene Oxides | | | | | Ethylene oxide | 1,2,3,4,6,7,14,15,17,18,19,23 |
| Propylene oxide |
| Group 17 | Cyanohydrins | | | | | Acetone cyanohydrin | 1,2,3,4,5,7,16,19,23 |
| Ethylene cyanohydrin |
| Group 18 | Nitriles | | | | | Acetonitrile | 1,2,3,4,16,23 |
| Adiponitrile |
| Group 19 | Ammonia | | | | | Ammonium Hydroxide | 1,2,7,8,13,14,15,16,17,20,23 |
| Ammonium Gas |
| Group 20 | Halogens | | | | | Chlorine | 3,6,7,8,9,10,11,12,13,14,15,19,21,22 |
| Fluorine |
| Group 21 | Ethers | | | | | Diethyl Ether | 1,14,20 |
| THF |
| Group 22 | Phosphorus | | | | | Phosphorus, Elemental | 1,2,3,20 |
| Group 23 | Acid Anhydrides | | | | | Acetic anhydride | 1,3,4,6,7,14,16,17,18,19 |
| Propionic anhydride |