

Chemical Compatibility Table

Chemical Class & Examples:	Incompatible Classes of Chemicals and Examples:
Acids (inorganic): Nitric acid, sulfuric acid, hydrochloric acid, hydrofluoric acid, perchloric acid	Bases: sodium hydroxide Other: potassium cyanide
Acids (organic): Glacial acetic acid, ethanoic acid, phenol	Bases: potassium hydroxide, sodium hydroxide Other: potassium cyanide Oxidizing agents: hydrogen peroxide, nitric acid, perchloric acid, potassium hypochlorite, potassium perchlorate
Alkali Metals: Sodium, lithium, potassium	Chlorinated hydrocarbons: Chloroform Halogens: iodine Other: carbon dioxide, water
Bases (caustic): Potassium hydroxide, sodium hydroxide	Acids (organic): acetic acid, ethanoic acid, phenol Acids (inorganic): nitric acid, sulfuric acid, hydrochloric acid, hydrofluoric acid, perchloric acid Flammable solvents (hydrocarbons): acetone, acetonitrile (ACN), benzene, ethanol, diethyl ether, isopropanol, methanol, methyl ethyl ketone, tetrahydrofuran (THF)
Chlorinated hydrocarbons: Carbon tetrachloride, methylene chloride, chloroform	Alkali Metals: sodium, lithium, potassium Bases: sodium hydroxide Other: mixture of acetone and base
Combustibles liquids and solids: Diesel, vacuum oil, grease	Oxidizing agents: hydrogen peroxide, nitric acid, perchloric acid, potassium hypochlorite, potassium perchlorate
Hydrocarbons (flammable solvents): Acetone, acetonitrile (ACN), alcohols, benzene, diethyl ether, methanol, methyl ethyl ketone, tetrahydrofuran (THF)	Bases (caustic): potassium hydroxide, sodium hydroxide Oxidizing agents: hydrogen peroxide, nitric acid, perchloric acid, potassium hypochlorite, potassium perchlorate
Halogenated hydrocarbons: Carbon tetrachloride, chloroform, methylene chloride	Alkali Metals: sodium, lithium, potassium Bases: sodium hydroxide, potassium hydroxide Metal: aluminum, manganese Oxidizing agents: nitric acid Other: plastics, rubber
Halogens: Fluorine, chlorine, bromine, iodine	Flammable solvents: acetone, acetonitrile (ACN), benzene, ethanol, diethyl ether, isopropanol, methanol, methyl ethyl ketone, tetrahydrofuran (THF)
Metals: aluminum, copper, gold, iron, mercury, silver, zinc	Acids (organic): acetic acid Bases (caustic): potassium hydroxide, sodium hydroxide Oxidizing agents: nitric acid Other: sodium azide
Oxidizing agents: Oxygen, chlorine, hydrogen peroxide, nitric acid, perchloric acid, potassium hypochlorite, potassium perchlorate	Acids (organic): acetic acid Combustible liquids and solids: oils and grease Flammable solvents: Acetone, alcohols