

Dos and Don'ts of Chemical Storage

NB The following information is provided as guidance only. **Always** refer to the safety data sheet supplied with substances for specific storage information.

DO NOT	WHY	DO
Do not store peroxides with flammable solvents	Peroxides form explosive materials on contact with solvent	Peroxides can be stored in a laboratory refrigerator
Do not store strong acids and bases with solvents	Acids and bases react with solvents to release heat and evolve gas Nitric acid will react violently with solvents	Store strong acids and bases in a cabinet designed for corrosive substances
Do not store acetic acid or acetic anhydride with acids	Acetic acid and acetic anhydride are flammable and will react violently with nitric acid	Store acetic acid as organic solvent rather than a corrosive substance
Do not store pyrophoric substances in flammable solvent cabinets or stores	One is a source of ignition the other is a fuel	Store pyrophoric materials in separate flame proof containers. Refer to the safety data sheet for specific conditions
Do not overload storage shelves	The weight of the material may exceed the safe loading weight of the shelf	Store minimum quantities of solvents and chemicals and avoid duplication of common chemicals
Do not mix waste in the same containers	Mixing two or more waste chemicals can cause violent reactions (e.g. chloroform and acetone or methanol in the presence of sodium hydroxide will react violently)	Store waste flammable solvent separately from chlorinated solvents <i>NB halogenated solvents are generally not flammable and do not need to be stored in a flammable solvent cabinet</i>
Do not store waste in poorly labelled containers	Poor labelling can result in mixing incompatible materials and / the waste being handled inappropriately	Label all waste containers clearly and accurately with the contents, hazards and where they originated (name of producer)
Do not put cardice (solid carbon dioxide also known as dry ice) or cardice / solvent mixtures into sealed bottles or containers	The liberated CO ₂ will cause an explosive overpressure	Cardice / solvent mixtures should be allowed to reach room temperature before putting the solvent into bottles alternatively use storage bottles fitted with venting lids