

Environmental Health and Safety

Chemical Safety

Peroxidizable Compounds

The chemicals listed below must be labeled with the date opened, and must be tested for peroxides within the time listed for each group (remark the label).

Group 1 (3 months)

Divinyl acetylene
Isopropyl ether
Potassium metal
Sodium amide
Vinylidene chloride

Group 2 (6 months)

Acetal
Cumene
Cyclohexene
Diacetylene
Dicyclopentadiene
Diethyl ether
Dimethyl ether
Dioxane
Ethylene glycol dimethyl ether
Glyme
Methyl acetylene
Methyl isobutyl ketone
Methylcyclopentane
Tetrahydrofuran
Tetrahydronaphthalene (Tetralin)
Vinyl ethers

Group 3 (12 months)

Acrylic acid
Acrylonitrile
Butadiene
Chloroprene
Chlorotrifluoroethylene
Methyl methacrylate
Styrene
Tetrafluoroethylene
Vinyl acetate
Vinyl acetylene
Vinyl chloride
Vinyl pyridine

The peroxide hazard from Group 1 is derived solely from storage. Group 2 presents a peroxide hazard upon concentration (evaporation, etc.). Group 3 is hazardous due to peroxide initiation of polymerization. When stored as a liquid, the peroxide forming potential of the Group 3 chemicals increases and certain of these monomers (especially butadiene, chloroprene and tetrafluoroethylene) should then be considered as Group 1 compounds.
