

Table 1. Common chemicals that form explosive levels of peroxides and their storage limits.^a

Peroxidizable chemicals		
High hazard - autopolymerizes (24 hr-12 month storage) ^{c,d}	Medium hazard - may become heat or shock sensitive 'on the shelf' (3-month storage)	Potentially hazardous - may form heat or shock sensitive residue on evaporation or distillation ^{b,c} (12-month storage)
Acrylic acid	Butadiene ^{d,e}	Acetal
Acrylonitrile ^{e,f}	Chloroprene ^f	Acetaldehyde
Butadiene ^{e,g}	Divinyl acetylene	Benzyl alcohol
Chloroprene	Isopropyl ether	2-Butanol
Chlorotrifluoroethylene	Potassium metal	Cyclohexanol
Methyl methacrylate	Sodium amide	2-Cyclohexene-1-ol
Styrene	Tetrafluoroethylene ^f	Cumene
Tetrafluoroethylene	Vinylidene chloride	Decahydronaphthalene
Vinyl acetate		Diacetylene
Vinyl acetylene		Dicyclopentadiene
Vinyl chloride ^e		Diethyl ether
Vinyl pyridine		Diethylene glycol dimethyl ether
		Dioxanes
		Ethylene glycol dimethyl ether
		4-Heptanol
		Methyl acetylene
		Methyl isobutyl ketone
		3-Methyl-1-butanol
		Methylcyclopentane
		2-Pentanol
		4-Pentene-1-ol
		1-Phenylethanol
		2-Phenylethanol
		2-Propanol
		Tetrahydrofuran
		Tetrahydronaphthalene
		Vinyl ethers
		Other secondary alcohols

^a Other materials than those listed may form peroxides. Contact your ES&H Team for further information.

^b May become unstable if concentrated by the user.

^c Chemicals to be stored for 24 hours if uninhibited or 12 months if inhibited.

^d When stored as an inhibited liquid monomer.

^e OSHA-related carcinogen.

^f When stored as a liquid monomer.

^g When stored as a gas.