**APPENDIX B**

**CHEMICALS THAT CAN FORM PEROXIDES UPON AGING***

**Class A:** Chemicals that form explosive levels of peroxides without concentration.

**Organic:**
- Butadiene
- Chlorobutadiene (Chloroprene)
- Divinyl ether
- Divinyl acetylene
- Isopropyl ether
- Tetrafluoroethylene
- Vinylidene chloride

**Inorganic:**
- Potassium amide
- Potassium metal
- Sodium amide (sodamide)

**Class B:** The following chemicals are a peroxide hazard upon concentration (distillation/evaporation). Test for peroxides if concentration is intended or suspected.

- Acetal
- Cumene
- Cyclohexene
- Cyclooctene
- Cyclopentene
- Diacetylene
- Dicyclopentadiene
- Diethylene glycol dimethyl ether (diglyme)
- Diethyl ether (Ethyl ether)
- Dioxane ($p$-dioxane)
- Ethylene glycol dimethyl ether (glyme)
- Furan
- Methyl acetylene
- Methyl cyclopentane
- Methyl-isobutyl ketone
- Tetrahydrofuran
- Tetrahydronaphthalene (Tetraline)
- Vinyl ethers

**Class C:** Unsaturated monomers that may polymerize as a result of peroxide accumulation if inhibitors have been removed or depleted.

- Acrylic acid
- Butadiene
- Chlorotrifluoroethylene
- Ethyl acrylate
- Ethyl methacrylate
- Methyl methacrylate
- Styrene
- Vinyl acetate
- Vinyl chloride
- Vinyl pyridine

* These lists are illustrative, not comprehensive.
