

Common Laboratory Chemicals that Form Peroxides During Storage

Acetal	Diisopropyl ether	Sodium Amide
Butadiene	Dioxane	Styrene
Cumene	Dimethyl ether	Tetrahydrofuran
Cyclohexane	Divinyl acetylene	Tetrahydronaphthalene
Cyclooctene	Ethyl ether	Tetralin
Decahydronaphthalene	Ethylene glycol dimethyl ether	Vinyl acetate
Decalin	Isopropyl ether	Vinyl acetylene
Diacetylene	Methyl acetylene	Vinyl chloride
Dicyclopentadiene	Methylcyclopentane	Vinyl ethers
Diethylene glycol	Potassium metal	Vinylidene chloride

How to Store Peroxide Formers:

- Mark on containers of time-sensitive materials both the date of receipt and the date the container is first opened.
- Time-sensitive materials should be marked with a tag to make them easily identified.
- No materials should be used or tested after the manufacturer's expiration date unless evidence of current stability has been obtained via direct testing *prior* to the expiration date.
- Refillable dispensing containers holding peroxide formers must be dated with the fill date.

NOTE: If material is old (>1 year past label expiration), then minimize handling and DO NOT OPEN OR ATTEMPT TO TEST! Call the Office of Research Safety & Compliance [Tom Bialke – (330) 672-4996, or tbialke@kent.edu]. Isolate the container from possible inadvertent use until picked up. If the material is very old or shows evidence of conversion to a hazardous status (i.e., crystalline materials in/under cap of ethers), do not move the container!