

Overview:

Chemicals listed as peroxide-formers have the potential to form explosive crystals under certain circumstances. Stored chemicals that go unused over several months and are exposed to air, heat, moisture, or light can contribute to a potential explosion or injury simply by unscrewing the cap or disturbing the container. It is important to inspect containers for any observable crystals or solids present and to periodically test for non-observable formations of peroxides. **CONTACT ENVIRONMENTAL HEALTH AND SAFETY, OR THE SCIENCE LABORATORY DIRECTOR IF PEROXIDES ARE VISIBLE OR IF THERE IS A POSITIVE RESULT WHEN TESTING FOR PEROXIDES.**

Instructions:

1. Check to see if your laboratory works with any peroxide-forming chemicals. Most chemical manufacturers will indicate, "may form explosive peroxides" on the label.
2. Once the peroxide formers are identified, a label must be placed on each container indicating the "Date Received," "Date Opened," and "Expiration Date." This label will be used to determine when to begin testing and when it is time to dispose of the chemical container.
3. The allowable time period for use of the chemical may be extended after peroxide testing. This testing is to be completed by laboratory personnel. Peroxide testing strips are available in the Science Department and labels are available through [Environmental Health and Safety](#).
4. Contact Environmental Health and Safety for waste peroxides at x4117 or safety@jjay.cuny.edu.

Test strips are available from the Science Department



Label Peroxide Formers

Warning Peroxide Forming Chemical		
Date Received _____	Date Open _____	Expiration _____
Date Tested/Result: _____		
Date Tested/Result: _____		
Date Tested/Result: _____		
Date Tested/Result: _____		
<small>This material can cause potentially explosive peroxide byproducts. Regular testing and disposal will prevent accidents. Visit the Environmental Health and Safety website or contact EHS for more information: safety@jjay.cuny.edu.</small>		

Some Peroxide Forming Chemicals

Group A Chemicals---Test for peroxides before using; discard after 3 months			
Butadiene	Potassium metal		
Chloroprene	Sodium amide		
Divinyl acetylene	Tetrafluoroethylene		
Isopropyl ether	Vinylidene chloride		
Potassium amide			
Group B and C Chemicals--- Test for peroxides every 6 months; discard after 12 months			
Acetal	2-Cyclohexene-1-ol	Furan	Stryene
Acetaldehyde	1,4-Dioxane	4-Heptanol	Tetrahydrofuran
Benzyl alcohol	Decahydronaphthalene	2-Hexanol	Tetrahydronaphthalene
2-Butanol dioxanes	Diacetylene	Methyl acetylene	Vinyl acetate
Chlorobutadiene	Dicyclopentadiene	3-Methyl-1-butanol	Vinyl acetylene
Chlorofluoroethylene	Diethylene glycol dimethyl ether	Methyl isobutyl ketone	Vinyl chloride
Cumene	Diethyl ether	4-Methyl-2-pentanol	Vinyl ethers
Cyclohexene	Ethylene glycol ether acetates	4-Pentene-1-ol	Vinyl pyridine
Cyclopentene	Ethylene glycol monomethyl ether	2-Phenylethanol	