

Broward College Central Campus Chemistry Laboratories

Peroxidizable Chemical Information, Labeling, and Handling

Under normal storage conditions, peroxidizable compounds can form and accumulate peroxides which may explode when subjected to heat or shock. This material is most hazardous when peroxide levels are concentrated by distillation or **evaporation**.

Storage

- ✔ Peroxidizables shall be stored in tightly sealed, air-impermeable, light-resistant containers away from heat and be protected from ignition sources.
- ✔ Peroxidizable chemicals shall be stored in cool locations, dry, well-ventilated area away from incompatible substances.
- ✔ Store in Flammables area (cabinets), where appropriate.
- ✔ Addition of water or appropriate reducing materials will lessen peroxide formation.
- ✔ Containers should be dated when opened.
- ✔ Should crystals form in a peroxidizable liquid, peroxidation may have occurred and the product should be considered extremely dangerous. In this instance, the container should only be opened remotely by professionals.

Labeling and Shelf-Life Limitation

In order to implement a shelf-life limit program for auto-oxidizable chemicals, each container of peroxidizable chemical shall be labeled with the date received by the user and the date opened. The end user is responsible for labeling the containers. The user shall assign an appropriate expiration date to containers. Opened containers must be disposed of within six months. Unopened containers may stay on site for twelve months.

WARNING: Contact the Fire Department immediately (dial 911) if there is reason to believe that dangerous levels of peroxides may be present in a container.

Handling

- ✔ Wash thoroughly after handling.
- ✔ Remove contaminated clothing and wash before reuse.
- ✔ Use spark-proof tools and explosion proof equipment.
- ✔ Loosen closure cautiously before opening.
- ✔ Empty containers retain product residue, (liquid and/or vapor), and can be dangerous.
- ✔ Take precautionary measures against static discharges. If peroxide formation is suspected, do not open or move container. Do not expose empty containers to heat, sparks or open flames.
- ✔ Use only with adequate ventilation. Avoid breathing vapor or mist.