# SMU EHS Standard Operating Procedure for use of OXIDIZERS

Examples: oxygen, peroxides, nitrates, chlorites, hypochlorites, chlorates, perchlorates, permanganates, chromates, dichromates

## HAZARDS

### Potential Hazards
- Can initiate or promote combustion in other materials, usually through the release of oxygen.
- Many oxidizers are also corrosive. See Corrosives SOP.
- See Safety Data Sheet (SDS) for specific hazard information.

## HAZARD CONTROLS

### Selection and Purchase
- Purchase the smallest containers at the lowest concentration practical.
- Purchase in shatter-resistant containers if available.

### Storage and Transportation
- Store away from flammable and combustible materials in a cool, dry location.
- Store below eye level but not on the floor.
- Do not use corks or rubber stoppers.
- Do not store on wooden shelves or in wooden cabinets.
- See SDS for specific storage incompatibility information.
- Transport in a bottle carrier or secondary containment.

### Engineering Controls
- Work in a chemical fume hood if:
  - Performing reactions that may generate heat, gases, or toxic or irritating fumes.
  - Working with inhalation hazards.
- If corrosive, an eyewash and safety shower must be in immediate work area.

### Work Practice Controls

Use caution when mixing oxidizers with flammable or combustible materials. Mixing smaller quantities may reduce generation of heat and help control the reaction.

### Personal Protective Equipment (PPE)

#### Minimum PPE:
- Fastened lab coat
- Safety goggles
- Compatible gloves

#### Risk of splash or large amounts, add:
- Chemical splash goggles and face shield
- Impervious sleeves and apron (or coverall)
- Thicker chemical-resistant gloves

If applicable, see guidelines for Corrosives.

Consult the manufacturer’s glove guide for effectiveness with the chemical.

## OTHER

### Waste
Collect and store according to SMU Hazardous Waste guidelines.

### Training
Sign Laboratory Specific Training document to indicate understanding of this SOP.

### Questions
Contact Environmental Health and Safety at 214-768-2430.

### Additional Guidelines
Please complete page 2 for additional laboratory-specific guidelines.
Laboratory-specific chemicals and procedures: