

## **SMU EHS Standard Operating Procedure for use of**

## **OXIDIZERS**



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

HAZARDS	Potential Hazards	<ul> <li>Can initiate or promote combustion in other materials, usually through the release of oxygen.</li> <li>Many oxidizers are also corrosive. See Corrosives SOP.</li> <li>See Safety Data Sheet (SDS) for specific hazard information.</li> </ul>
HAZARD CONTROLS	Selection and Purchase	<ul> <li>Purchase the smallest containers at the lowest concentration practical.</li> <li>Purchase in shatter-resistant containers if available.</li> </ul>
	Storage and Transportation	<ul> <li>Store away from flammable and combustible materials in a cool, dry location.</li> <li>Store below eye level but not on the floor.</li> <li>Do not use corks or rubber stoppers.</li> <li>Do not store on wooden shelves or in wooden cabinets.</li> <li>See SDS for specific storage incompatibility information.</li> <li>Transport in a bottle carrier or secondary containment.</li> </ul>
	Engineering Controls	<ul> <li>Work in a chemical fume hood if:         <ul> <li>Performing reactions that may generate heat, gases, or toxic or irritating fumes.</li> <li>Working with inhalation hazards.</li> </ul> </li> <li>If corrosive, an eyewash and safety shower must be in immediate work area.</li> </ul>
	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  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:			