

Principal Investigator: \_\_\_\_\_

Date Approved: \_\_\_\_\_

**This Chemical Safety Protocol (CSP) covers basic chemical safety information for oxidizing corrosives and supplements the laboratory Chemical Hygiene Plan as appropriate. Additional lab-specific safety operating procedures for oxidizing corrosives may also be required. The use of any oxidizing corrosive is subject to pre-approval by the Principal Investigator (PI) and/or the designated Laboratory Responsible Safety Person. DO NOT USE OXIDIZING CORROSIVES UNTIL YOU HAVE OBTAINED THE NECESSARY PRE-APPROVAL AND TRAINING.**

## Oxidizing Corrosives

**Oxidizing corrosives** are materials that can contribute to combustion by acting as an oxygen source and can also cause destruction of exposed tissues. Examples of this type of substance include **silver nitrate, sodium peroxide, calcium hypochlorite, and potassium permanganate.**

This SOP excludes nitric acid, perchloric acid, chromic acid and dichromate salts, and peracetic acid. Please refer to those chemical-specific SOPs if needed.

**For more information** on each individual hazard type, please refer to the respective 'single hazard' SOP.



## Personal Protective Equipment & Personnel Monitoring



**Lab Coat**

Traditional lab coat. A chemical-resistant lab apron should be used when handling large quantities.



**Gloves**

Nitrile or neoprene gloves typically provide adequate protection against minor splashes. Consult glove selection chart for heavy handling of corrosives.

**Do not wear latex gloves.**



**Eye Protection**

ANSI Z87.1-compliant safety glasses or safety goggles, or face shield if a splash hazard is present.



**Face Shield**

## Labeling & Storage

Store upright & tightly closed in a dry and well-ventilated place. Keep away from organic materials, flammables, reducing agents, and any other incompatible chemicals. **Do not** store in wooden or metal cabinets. Containers must be stored below eye level. Also, if not plainly visible (e.g. through a cabinet window), labeling must be applied to storage locations where these are stored to avoid an inadvertent encounter.

## Engineering Controls, Equipment & Materials

### Ventilation

At a minimum, adequate general laboratory ventilation must be provided to maintain exposure below any regulatory limits. A fume hood is recommended for volatile substances with corrosive vapors.

## Housekeeping

<b>Releases</b>	Immediately notify others in the area of the release and evacuate the location where the release occurred. Notify your PI/Responsible Safety Person and call Vanderbilt University Public Safety (VUPS) at 615-421-1911 or use the Vandysafe app on your smart phone. Report any exposure through Risk and Insurance Management's Origami portal and mark that it occurred in research when prompted. Both VUPS and the Origami system will notify EHS of the incident. Remain on-site at a safe distance to provide detailed information to first responders.
<b>Decontamination</b>	Decontamination methods will vary based on the materials handled and equipment being used. Please review the chemical Safety Data Sheet for guidance on cleaning materials.
<b>Waste</b>	Refer to the laboratory <i>Chemical Hygiene Plan</i> (Section 6.7) for information on proper chemical waste disposal procedures.

### First Aid & Emergencies

<b>Skin or Eye Contact</b>	Remove contaminated clothing and accessories; flush affected area with water. If symptoms persist, get medical attention.
<b>Inhalation</b>	Move person into fresh air. If symptoms persist, get medical attention.
<b>Ingestion</b>	Rinse mouth with water. If symptoms persist, get medical attention.

