

Specific Standard Operating Procedure

for work with

Chemical name/class:	Oxidizers	CAS #:	Various
PI: Ken Henderson		Date: 1-24-13	
Building: Stepan		Room #: Laboratory Stepan 386	

1. **Circumstances of Use:**

Various.

2. **Potential Hazards:**

Oxidizers are agents that initiate or promote combustion in other materials, generally through the release of oxygen. Examples include *potassium permanganate*, *sodium nitrite*, *manganese oxide*, *hydrogen peroxide*, and *hydrazine*.
Check MSDS to determine if a material is an oxidizer and to identify other hazards. Many oxidizers are corrosive to the body – if so, also follow the SOP for work with [Corrosives](#).

3. **Engineering Controls:**

4. **Work Practice Controls:**

- Minimize the quantities of oxidizers on hand.
- Exercise caution when mixing oxidizing agents with flammable or combustible materials for research. Use small amounts to reduce generation of heat and control the reaction.

5. **Personal protective equipment (PPE):**

Wear standard nitrile laboratory gloves, lab coat, and safety glasses for all work with oxidizers. If working with an oxidizer that is also corrosive, follow PPE recommendations in SOP for work with corrosives.

6. **Transportation and Storage:**

- Store away from flammable and combustible materials in a cool, dry location.
- Do not store on wooden shelves or in wooden cabinets.
- Do not use corks or rubber stoppers.

7. **Waste Disposal:**

Handle and store waste oxidizers wastes following the guidelines above while accumulating wastes and awaiting chemical waste pickup. Waste must be disposed of following the chemical hygiene plan.

8. **Exposures/Unintended contact:**

Contact RM&S for medical advice on occupational chemical exposures, **1-5037**. For an actual chemical exposure or injury, complete the work-related injury or illness report found at: <http://chemistry.nd.edu/safety/supervisors-report-of-injury-to-the-health-center.pdf>. If medical attention is needed, see <http://chemistry.nd.edu/safety/procedures-for-injury->

[illness-or-incident.pdf](#).

9. **Spill Procedure:**

Contact RM&S for medical advice on occupational chemical exposures, **1-5037**. For an actual chemical exposure or injury, complete the work-related injury or illness report found at: <http://chemistry.nd.edu/safety/supervisors-report-of-injury-to-the-health-center.pdf>. If medical attention is needed, see <http://chemistry.nd.edu/safety/procedures-for-injury-illness-or-incident.pdf>.

10. **Training of personnel:**

All personnel are required to complete the General Lab Safety session thru RM&S. This session includes an introduction to general chemical safety. Furthermore, all personnel shall read and fully adhere to this SOP when handling oxidizers.