




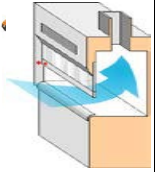







CHEMICAL HAZARD GUIDELINE

|  <h2 style="margin: 0;">Oxidizers</h2> <p style="margin: 0;"><i>Examples: Chlorates, Nitrates, Permanganates, Peroxides</i></p>  | |
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| Hazards | <p>Potential Hazards</p> <ul style="list-style-type: none"> Liquids, solids and gases which readily give off oxygen – can lead to initiation or promotion of combustion. Oxidizers can also be toxic or corrosive. See Safety Data Sheet (SDS) for specific hazard information. <i>A lab-specific SOP is needed for particularly hazardous chemicals and/or any operation involving a high-risk chemical. PI approval of lab specific SOP is required for all particularly hazardous chemicals and/or high-risk chemicals.</i>  |
| Hazard Controls | <p>Purchasing</p> <ul style="list-style-type: none"> Purchase the smallest containers at the lowest concentration practical. Purchase in shatter-resistant containers If available (such as plastic or PVC-coated glass). |
| | <p>Storage and Transportation</p> <ul style="list-style-type: none"> Store away from flammable and combustible materials in a cool, dry location. <ul style="list-style-type: none"> 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 oxidizers in a bottle carrier.  |
| | <p>Work Practice Procedures</p> <ul style="list-style-type: none"> Use caution when mixing oxidizers with flammable or combustible materials. Mixing smaller quantities may reduce generation of heat and help control the reaction. Do not use potentially reactive oxidizer mixtures outside of acceptable temperature ranges. The additional heat may initiate a violent or explosive reaction. Reactions involving oxidizers are often very exothermic. Use heat-resistant labware and allow extra volume in your vessel to account for expansion and/or foaming.  |
| | <p>Engineering Controls</p> <ul style="list-style-type: none"> Eyewash required in the immediate work area. <ul style="list-style-type: none"> Eyewash-drench hose preferred. Work inside of a chemical fume hood when performing reactions that may generate heat, gases, or toxic/irritating fumes.  |

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| | <p>Personal Protective Equipment</p> | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  EYE PROTECTION </div> <div style="text-align: center;">  FACE SHIELD </div> <div style="text-align: center;">  CHEMICAL GLOVES </div> <div style="text-align: center;">  LAB COAT </div> <div style="text-align: center;">  LONG PANTS </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> CLOSED TOED SHOES ARE REQUIRED </div> </div> <p>Note: Always refer to glove manufacturer for chemical specific glove type.</p> |
| Other | <p>Waste</p> | <p>Collect as hazardous waste. For disposal, request waste pick-up through EHRS.</p> |
| | <p>Emergencies</p> | <p>In the event of an emergency – Call campus safety at (215) 214-1234 & EHRS at (215) 707-2520.</p> <p>Direct contact – Flush contaminated area with copious amounts of water (eyewash or safety shower) and then seek medical attention.</p> <p>Spill/ Release – Refer to the spill management sheet for general spill cleanup. Contact EHRS for additional assistance or guidance.</p> <p>Fire – Fires involving oxidizers can be very difficult to extinguish. An ABC dry powder fire extinguisher should be adequate for very small fires, but may be inadequate for larger fires.</p> |
| | <p>Training</p> | <p>Sign signature on Laboratory-Specific Training Checklist to indicate review.</p> |
| | <p>Questions</p> | <p>Contact Environmental Health and Radiation Safety (EHRS) at (215) 707-2520</p> |