



Explosives

Explosives are liquid or solid materials that can undergo a sudden release of pressure, gas, and heat when subjected to an initiating mechanism such as friction, impact, catalysts, light, or heat. Examples include: nitrocellulose, dibenzoyl peroxide, picrate salts, and most 'trinitro-' compounds. Chemicals covered by this SOP **do not** include peroxide-forming chemicals, picric acid, ammonium perchlorate or nitrate salts.



Personal Protective Equipment & Personnel Monitoring



Lab Coat

Flame resistant lab coat.



Gloves

Nitrile or neoprene gloves.



Eye Protection



Face Shield

ANSI Z87.1-compliant safety goggles, or face shield if a splash hazard is present. Consider using a blast shield for extra protection.

Labeling & Storage

Store at the manufacturer's recommended temperature in an explosion-proof refrigerator/freezer or an explosion-proof cabinet that does not contain flammables or chemically incompatible materials. Keep away from heat, light, and any potential initiating mechanisms.

Engineering Controls, Equipment & Materials

Fume Hood

Work in a chemical fume hood whenever possible. Keep the sash at the lowest practical height while working, and close the sash when the fume hood is not in use.

Blast Shield

When working with explosives the use of a portable blast shield inside the fume hood is highly recommended.

Cautions and Considerations

Initiating Mechanism

Before working with any potentially explosive chemicals, determine the initiating mechanism that could lead to an explosion; friction, impact, catalysts, light, or heat. Refer to the chemical safety data sheets (SDS) for this information. Also consider working with equipment that cannot generate static electricity or sparks.

Housekeeping

Spills

Notify others in the area of the spill, including your supervisor. Evacuate the location where the spill occurred and call 911. Any exposure must be reported to ORS at 706-542-5288. Remain onsite at a safe distance to answer questions from first responders.

Decontamination

Decontamination methods vary based on the materials handled and equipment being used. Please review the chemical Safety Data Sheet for guidance on cleaning materials.

Waste

Any waste from this chemical class should be disposed of through the UGA Hazardous Waste Program. For assistance with arranging a waste pickup, you may contact the Environmental Safety Division (ESD) at 706-542-5801. Prior to pickup, any container used to hold hazardous waste should be labeled with the following:

- "Hazardous Waste"
- chemical contents
- one or more of the following waste characteristics recognized by EPA: Ignitable, Corrosive, Reactive, or Toxic

In addition, any liquid hazardous waste must be stored in secondary containment trays until picked up by ESD.

First Aid & Emergencies

Skin or Eye Contact

Remove contaminated clothing and accessories; flush affected area with water. If symptoms persist, get medical attention.

Inhalation

Move person into fresh air. If symptoms persist, get medical attention.

Ingestion

Rinse mouth with water. If symptoms persist, get medical attention..