



Flammable Liquids

A flammable solvent is defined by the National Fire Protection Agency (NFPA) as having a flashpoint below 100°F (37.8°C). The flashpoint is the lowest temperature at which a material can form an ignitable mixture with air and produce a flame when an ignition source is present. The lower the flashpoint, the more easily the liquid can be ignited.



Personal Protective Equipment & Personnel Monitoring



Lab Coat

Flame resistant lab coat



Gloves

Nitrile or neoprene gloves typically provide adequate protection against minor splashes. Consult with your PI or supervisor to determine whether any materials involved in your process require alternative hand protection.



Eye Protection

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

Labeling & Storage

Flammable liquids should be stored in a flammable storage cabinet with self-closing hinges or in a refrigerator rated for flammable storage. There are limitations on the maximum allowable volume of flammable liquids in a laboratory as well (these limitations vary; for an assessment, please contact the Office of Research Safety at 706-542-5288). Keep away from oxidizers, and other incompatible corrosives.

Engineering Controls, Equipment & Materials

Fume Hood

It is advisable to use a fume hood when working with these materials. If the use of a fume hood is impossible or impractical, please contact the Office of Research Safety (ORS) to determine whether additional respiratory protection is required.

Cautions & Considerations

Static Electricity

When transferring flammable liquids between containers greater than 4L (1 gallon) containers should be grounded, and the source container should be bonded to the receiving container during transfer. If possible, transfer flammable chemicals from glass containers to glassware or from glass container/glassware to plastic. Transferring these types of chemicals between plastic containers or unbonded metal containers may lead to a fire hazard due to static electricity.

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

Fire

Use a Class B or CO2 extinguisher to put out a small fire.

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.