

Principal Investigator: _____




Date Approved: _____

This document covers basic chemical safety information for epichlorohydrin. The use of epichlorohydrin is subject to pre-approval by the Principal Investigator (PI) and/or Supervisor. PI and/or Supervisor may use the sheet attached to this SOP to document any lab specific training for Epichlorohydrin. **DO NOT USE EPICHLOROXYDRIN UNTIL YOU HAVE OBTAINED THE NECESSARY PRE-APPROVAL.**

Epichlorohydrin

Epichlorohydrin (C₃H₅ClO) is a highly reactive organic compound with a garlic-like odor. It is used in the manufacture of epoxy resin, and as a versatile reagent in organic synthesis. It is a colorless liquid that is flammable, corrosive, and carcinogenic. This substance is rapidly absorbed through skin, and acts as an alkylating agent of DNA to promote cancer.



Personal Protective Equipment & Personnel Monitoring		
 Lab Coat	 Gloves	 Eye Protection
Flame resistant lab coat and a chemical-resistant lab apron over top when handling large quantities	Polyvinyl alcohol or butyl gloves - DO NOT WEAR NITRILE OR NEOPRENE GLOVES	ANSI Z87.1-compliant safety goggles, or face shield if a splash hazard is present

Labeling & Storage

Store epichlorohydrin under inert gas, in a dry, well-ventilated place, and in a chemically-resistant secondary container within an approved flammable storage cabinet. Avoid heat, flames, or sparks. Primary containers should be labeled according to the UNC Charlotte Chemical Hygiene Plan. The secondary container's label must contain the chemical name and corresponding hazards. Incompatibilities: acids, bases, ammonia, amines, sodium/sodium oxides, zinc, magnesium, aluminum and its alloys, and halide salts.

Engineering Controls, Equipment & Materials

Fume Hood

Work with this chemical in a certified, ducted fume hood with electrically grounded lines and equipment. If your protocol does not permit the handling of such materials in a fume hood, contact EHS to determine whether additional respiratory protection is warranted.

Housekeeping

Spills

Notify others in the area of the spill, including your supervisor. Evacuate the location where the spill occurred. Call 911 from any campus phone (or 704-687-2200 from a cell phone). Report any exposure to EHS at 704-687-1111. Remain on-site (at a safe distance) to provide detailed information to first responders.

Decontamination

Clean any work surfaces which may have come in contact with epichlorohydrin using soap and water.

Waste

Refer to the UNC Charlotte Chemical Hygiene Plan for details.

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.

Name	Signature	Date