

Principal Investigator: _____




Date Approved: _____

This document covers basic chemical safety information for halogenated solvents. The use of halogenated solvents 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 Halogenated Solvents. **DO NOT USE HALOGENATED SOLVENTS UNTIL YOU HAVE OBTAINED THE NECESSARY PRE-APPROVAL.**

Halogenated Solvents

Halogenated solvents are liquids containing halogen atoms: fluorine, chlorine, bromine, or iodine. The halogenated solvents covered by this SOP are volatile and carcinogenic. Unlike many other carcinogens, they have the ability to penetrate disposable latex and nitrile gloves. Examples include dichloromethane (methylene chloride), chloroform, carbon tetrachloride, bromoethane, etc.



Personal Protective Equipment & Personnel Monitoring		
 Lab Coat	 Gloves	 Eye Protection
Traditional white lab coat or flame-resistant lab coat when working with flammable materials.	Two pairs of neoprene gloves. If the glove is chemically exposed, the outer glove must be removed and replaced immediately.	ANSI Z87.1-compliant safety glasses or safety goggles if a splash hazard is present.

Labeling & Storage

Store in secondary containment away any materials that may be chemically incompatible. 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. Also, if not plainly visible (e.g. through a cabinet window), labelling must be applied to storage locations where these are stored to avoid an inadvertent encounter.

Engineering Controls, Equipment & Materials

Fume Hood

It is advisable to use a fume hood when working with materials which are toxic by inhalation. 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

Work areas where halogenated solvents are used must be decontaminated on a routine basis to limit exposure. Soap and water is typically effective. Please review the chemical Safety Data Sheet for guidance on cleaning specific materials.

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.

