

Principal Investigator: _____

Date Approved: _____

This document covers basic chemical safety information for phenol. The use of phenol 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 Phenol. **DO NOT USE PHENOL UNTIL YOU HAVE OBTAINED THE NECESSARY PRE-APPROVAL.**





Phenol

Phenol is often a component of the commercial product Trizol, mixed with chloroform. Refer to the Halogenated Solvents SOP for information on chloroform. Phenol itself is acutely toxic and corrosive.

As a corrosive, phenol can cause serious eye damage and skin burns if exposure occurs. Skin exposures may go undetected for some time as it has some anesthetic properties. Therefore, careful attention should be paid to gloves to ensure that penetration or tearing have not occurred.

Phenol also has some significant toxicity properties, and can be fatal in small doses. Long-term exposure may damage the liver or kidneys.



Personal Protective Equipment & Personnel Monitoring			
 Lab Coat	 Gloves	 Eye Protection	 Face Shield
Traditional white lab coat or flame-resistant lab coat with a chemical-resistant lab apron when working with flammable materials.	Nitrile gloves. DO NOT WEAR LATEX GLOVES	ANSI Z87.1-compliant safety glasses or safety goggles, or face shield if a splash hazard is present.	

Labeling & Storage

Store away from strong oxidizers and any other materials that may be chemically incompatible. Containers must be stored below eye level. 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. Containers of phenol must be stored in leak-proof secondary containment within a Designated Area. 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

Decontaminate equipment and work surfaces which may have come into contact with phenol using soap and water.

Waste

Refer to the UNC Charlotte Chemical Hygiene Plan for details.

First Aid & Emergencies

Skin Contact

Immediately remove contaminated clothing and shoes; **DO NOT** flush effected area with water. Instead, treat with a low-molecular weight poly (ethylene glycol) (PEG) such as PEG 300 or PEG 400 for at least 15 minutes. Get medical attention immediately.

Eye Contact

Check for and remove contact lenses. Immediately flush eyes with water for at least 15 minutes. Get medical attention immediately.

Inhalation

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

Ingestion

Get medical attention immediately.

Name	Signature	Date
