

*Principal Investigator:* \_\_\_\_\_

*Date Approved:* \_\_\_\_\_

## 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 lab coat or flame-resistant lab coat with a chemical-resistant lab apron when working with flammable materials.	Nitrile gloves. <b>Do not wear latex gloves.</b>	ANSI Z87.1-compliant safety glasses or 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. Each container's label should include a skull-and-crossbones pictogram, the word "Danger", or identify the material as both acutely toxic and corrosive. Containers of phenol should be stored in leak-proof secondary containment within a Designated Area. The secondary container's label should include a skull-and-crossbones pictogram, the word "Danger", or identify the material as both acutely toxic and corrosive. 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 EH&S to determine whether additional respiratory protection is warranted.

## Housekeeping

### *Spills*

Treat all spills of this material as a major spill. Notify others in the area of the spill, including your supervisor. Evacuate the location where the spill occurred. Call 911 and alert TWU DPS (940-898-2911 in Denton; 214-689-6666 in Dallas; 832-870-6128 in Houston). Report any exposure to EH&S at 940-898-4001. 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. Please review the chemical Safety Data Sheet for guidance on cleaning materials.

### *Waste*

Refer to the TWU Chemical Hygiene Plan for details.

## First Aid & Emergencies

### *Skin Contact*

Immediately remove contaminated clothing and accessories. **If available, treat with a low-molecular weight poly(ethylene glycol) (PEG) such as PEG 300 or PEG 400 followed by flushing with water for at least 15 minutes.** If unavailable, flush with water for 15 minutes. Seek medical attention immediately.

### *Eye Contact*

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

### *Inhalation*

Move affected individual(s) into fresh air. If symptoms persist, seek medical attention.

### *Ingestion*

Seek medical attention immediately.



By signing and dating the log below, individuals are certifying that they have been informed and understand this Standard Operating Procedure and agree to abide by its contents.