**Phenol**

An organic compound with a sweet, tarry odor. Commonly used in tissue preservation as a disinfectant, and in combination with chloroform for nucleic acid extraction. A component of the reagents Trizol and QIAzol.

**Hazards**

- Toxic if inhaled, ingested, or absorbed through skin
- Causes severe skin burns and eye damage
- Initial skin contact can cause numbness, so burn may not be immediately apparent
- Breaks through 8 mil (0.2mm) nitrile gloves within 10 minutes; even faster when combined with chloroform
- Reacts with strong oxidizers

**Reduce Risk**

- Always work in a fume hood
- Wear splash goggles
- Wear a buttoned laboratory coat
- Wear fully enclosed shoes
- Choose gloves using...
  - Chemicals
  - Concentration
  - Contact Type
  - Duration
  - Dexterity
- C3D2
- If necessary, wear a rubber apron and face shield
- Never work alone

**In Case of an Emergency**

- Ensure there is a working safety shower and eyewash within 10 seconds of work area
- Stock Polyethylene Glycol PEG-300 or PEG-400 (Available through CyBuy)
- Small Skin Exposure: Irrigate or swab with PEG until the Phenol smell is no longer detectable and seek medical attention
- Large Skin Exposure: Seek immediate medical attention, treat with PEG until help arrives, if PEG is unavailable use a safety shower to thoroughly flush with water
- Seek immediate medical attention and use an eyewash to flush eyes with water until help arrives

Reviewed 2022