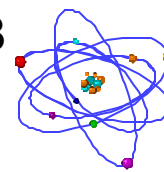


LABORATORY SAFETY FACT SHEET #18



Safe Use of Phenol



Phenol (carbolic acid) is a colorless or pink crystalline solid or viscous liquid with a characteristic sweet, tarry odor. It can affect the body if it is inhaled, ingested, or contacts eyes or skin.

Hazards With Acute Exposure

- Contact with eyes may cause severe damage and blindness.
- Contact with skin may cause severe burns or systemic poisoning.
- Systemic effects may occur from any route of exposure, especially after skin absorption.

Hazards With Chronic Exposure

- Repeated or prolonged skin exposure to phenol or vapors from heated phenol may cause headache, nausea, dizziness, diarrhea, vomiting, shock, convulsions, and death.
- Phenol affects the central nervous system, liver, and kidneys.

Special Safety Precautions

- Phenol should be used with adequate ventilation to minimize inhalation. When heating phenol, use a water bath inside a chemical fume hood. **NEVER** heat or melt phenol in an incubator, microwave, drying oven, or similar appliance.
- Prevent contact with skin by wearing neoprene gloves, lab coat, and resistant apron.
- Wear safety glasses or a face shield if splashing may occur.
- Store in a cool, dry, well-ventilated area, away from heated surfaces or ignition sources.
- Skin contact requires immediate washing of the affected area with soap and water. Remove contaminated clothing and launder before wearing again.
- When phenol is heated, it can react vigorously with oxidizing agents.
- Phenol waste should be placed in a properly labeled glass bottle with a securely sealed lid.
- **Spills of undiluted phenol should be considered serious and cleaned up immediately.** Small liquid spills of 50 ml or less may be absorbed using paper towels, vermiculite, or other absorbent and placed in a sealed container or double plastic bags. If the spill is larger than 50 ml, remove ignition sources, provide adequate ventilation, evacuate the laboratory, close the doors, and call EH&S at x-3194.

For further information, contact the EH&S Laboratory Safety Specialist at x-4899