**Standard Operating Procedure for Laboratories**

**BIS-CHLOROMETHYL-ETHER**

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| --- | --- |
| Department: | Click here to enter text. |
| Principal Investigator(s): | Click here to enter text. |
| Lab Manager/Coordinator: | Click here to enter text. |
| Location of Experiment:  (Building/Room Number) | Click here to enter text. |
| Lab Phone: | Click here to enter text. |
| Office Phone: | Click here to enter text. |
| Emergency Contact: (Name/Phone) | Click here to enter text. |

**Reviewed and Approved by**:

|  |  |  |
| --- | --- | --- |
| PI: (Typed Name) | Click here to enter text. | |
| PI: (Signature and Date) |  | Click here to enter a date. |
| Lab Manager: (if PI unavailable) |  | Click here to enter a date. |

**Hazardous Material Use and Management**

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| Hazardous Material(s) Used: (wt./volume) | Bis-chloromethyl-ether:  Maximum amount allowed without PI approval: |
| Hazardous Material Storage Location: | Store container tightly closed in a dry, cool and well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.  Designated Storage Area: |
| Experimental Procedure and Lab Technics to be Used: | Click here to enter text. |
| Hazard Identification: (i.e., physical/health hazards) | **CAS # 542-88-1**  **GHS Classification: Flammable liquid. Carcinogen. Acutely toxic by oral, inhalation or skin exposure.**   * Confirmed human carcinogen, lung most affected. * Poison by inhalation, ingestion and skin contact. * Dangerous fire hazard. * Degrades rapidly and easily evaporates into air. In aqueous solutions, it is rapidly hydrolyzed to form hydrochloric acid and formaldehyde. When heated to decomposition it emits toxic fumes of hydrochloric acid and other chlorinated compounds.   OSHA: Carcinogen  NIOSH: Carcinogen  Review MSDS/SDS prior to working with chemical. |
| Engineering Controls: (chemical fume hood, biosafety cabinet, glove box) | Use in chemical fume hood with adequate exhaust.  Eyewash and safety showers must be readily available. |
| Protective Equipment: | Always handle with gloves. Fluorinated rubber, nitrile or chloroprene gloves are sufficient. Wear safety glasses or goggles. Faceshield may be recommended. Wear flame resistant lab coat (100% cotton based), full length pants and closed-toe shoes.  Check with glove manufacturer for more info. |
| Waste Collection/Disposal Method: | Waste should be collected in tightly closed container, in secondary containment and in a designated location inside a fume hood. Affix and complete hazardous waste label. Contact REHS for waste pick up.  <https://halflife.rutgers.edu/forms/hazwaste.php> |
| Spill Management: | Wear appropriate protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Contain spill, and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal.  If a spill happened outside fume hood, on floor, on bench or outside the lab contact REHS for clean up or call 911. |
| First Aid: | **Eyes**: Flush eyes with warm water for 15 min as a precaution.  **Skin**: Wash affected skin with mild soap and plenty of water. Consult a physician.  **Inhalation**: Remove to fresh air. If breathing is difficult give oxygen. Consult a physician.  **Ingestion:** Rinse mouth with water. Consult a physician. |

**Training**

* Prior to conducting any work with bis-chloromethyl-ether, designated personnel must be provided training specific to the hazard involved in working with the substance.
* The PI must provide his/her lab personnel with a copy of the SOP and a copy of the SDS provided with the manufacturer.
* The PI must ensure that his/her lab personnel have attended and are up to date on the appropriate laboratory safety training within the last year.

I have read and understood the content of this SOP and the SDS:

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| --- | --- | --- |
| Lab Personnel  (Running the Experiment) | Date of Hands-on Training from Department | Signature of Lab Personnel |
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| Click here to enter text. | Click here to enter text. |  |

**BIS-CHLOROMETHYL-ETHER**

**Flammable liquid. Carcinogen. Acutely toxic by oral, inhalation or skin exposure.**

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**FIRST AID**

**Eyes**: Flush eyes with warm water for 15 min as a precaution.

**Skin**: Wash affected skin with mild soap and plenty of water. Consult a physician.

**Inhalation:** Remove to fresh air. If breathing is difficult give oxygen. Consult a physician.

**Ingestion**: Rinse mouth with water. Consult a physician.

**DIAL 911 Call REHS for more information 848-455-2550**