**Standard Operating Procedure for Laboratories**

**METHYLAMINE**

|  |  |
| --- | --- |
| 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**

|  |  |
| --- | --- |
| Hazardous Material(s) Used: (wt./volume) | Methylamine:Maximum amount allowed without PI approval: |
| Hazardous Material Storage Location: | Store in flammable cabinet in a well-ventilated area. Avoid heat, flames, sparks and other sources of ignition. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling.Designated Storage Area:  |
| Experimental Procedure and Lab Techniques to be used: | Lab must have written procedure for cylinder purge, set up and swap. |
| Hazard Identification: (i.e., physical/health hazards) | **CAS # 74-89-5****GHS Classification: Extremely flammable gas under pressure. Corrosive. Skin and eye irritant. Harmful if inhaled.** * Poison by subcutaneous route.
* Moderately toxic by inhalation.
* A severe skin irritant. Mutation data reported.
* A strong base.
* Flammable gas at room temperature and pressure.
* Explosive when exposed to heat or flame. Forms explosive mixture with nitromethane.

OSHA PEL: TWA 10 ppm (12 mg/m3)ACGIH TLV: 5 ppm, STEL 15ppmNIOSH TWA 10 ppm (12 mg/m3)Review MSDS/SDS prior to working with chemical. |
| Engineering Controls: (chemical fume hood, biosafety cabinet, glove box) | Use methylamine in chemical fume hood with adequate exhaust or with local exhaust that is explosion –resistant. Eyewash and safety showers must be readily available. |
| Protective Equipment: | Wear chemical safety goggles, a faceshield may be required.Use chemical resistant gloves.Wear anti-static and flame resistant clothing (cotton based), long pants and closed-toe shoes.  |
| Waste Collection/Disposal Method: | Empty gas cylinders should be returned to the compresses gas distributer. Make sure that valve protection cap is in place.All other waste should be collected in tightly closed container, in secondary containment and in a designated location inside a fume hood. Store waste away from incompatible waste. Affix and complete hazardous waste label. Contact REHS for waste pick up.<https://halflife.rutgers.edu/forms/hazwaste.php> |
| Spill Management:  | Evacuate surrounding areas. Keep personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe gas. Provide adequate ventilation. If safe, stop the leak, use spark-proof tools. Wear appropriate respirator when ventilation is inadequate.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: | Symptoms may be delayed up to 48 hours.**Eyes:** Check and remove contact lenses. Immediately flush eyes with warm water for 15 min. Seek medical attention. **Skin**: To remove contaminated clothing thoroughly soak it with water to avoid static discharge. Immediately flush skin with plenty of water. Seek medical attention.**Inhalation**: Remove to fresh air. If breathing is difficult give oxygen. Call a poison center. Seek medical attention.**Ingestion:** This chemical is a gas, so ingestion is not probable.  |

**Training**

* Prior to conducting any work with methylamine, 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:

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

**METHYLAMINE**

**Extremely flammable gas under pressure. Corrosive. Skin and eye irritant. Harmful if inhaled.**

****

**FIRST AID**

Symptoms may be delayed up to 48 hours.

**Eyes**: Check and remove contact lenses. Immediately flush eyes with warm water for 15 min. Seek medical attention.

**Skin:** To remove contaminated clothing thoroughly soak it with water to avoid static discharge. Immediately flush skin with plenty of water. Seek medical attention.

**Inhalation:** Remove to fresh air. If breathing is difficult give oxygen. Call a poison center. Seek medical attention.

**Ingestion**: This chemical is a gas, so ingestion is not probable

**DIAL 911 Call REHS for more information 848-445-2550**