Standard Operating Procedure

1,1,1,3,3,3-Hexafluoro-2-propanol (Hexafluoropropanol)

**This is an SOP template and is not complete until: 1) lab specific information is entered into the box below 2) lab specific protocol/procedure is added to the protocol/procedure section and
3) SOP has been signed and dated by the PI and relevant lab personnel.**

Print a copy and insert into your *Lab-Specific Chemical Hygiene Plan*.

**Section 1 – Lab-Specific Information**

| **Building/Room(s) covered by this SOP:** | Click here to enter text. |
| --- | --- |
| **Department:** | Click here to enter a date. |
| **Principal Investigator Name:** | Click here to enter text. |
| **Principal Investigator Signature:** | Click here to enter text. |

**Section 2 – Hazards**

Hexafluoropropanol is acutely toxic (oral and inhalation). It is also corrosive and can cause serious eye and skin damage. It is harmful if swallowed; avoid breathing dust, fumes, gas, mist, vapors, or spray. Wear appropriate PPE and only use in a chemical fume hood.



**Section 3 – Engineering Controls and Personal Protective Equipment (PPE)**

**Engineering Controls:** Use of hexafluoropropanol must be conducted in a properly functioning chemical fume hood. The chemical fume hood must be approved and certified by REM and have a face velocity between 85 – 125 feet per minute.

**Hygiene Measures:** Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product.

**Hand Protection:** Chemical-resistant gloves must be worn, butyl rubber or chloroprene gloves are recommended. Wearing two pairs of gloves is recommended. **NOTE:** Consult with your preferred glove manufacturer to ensure that the gloves you plan on using are compatible with the specific chemical being used.

**Eye Protection:** ANSI approved properly fitting safety glasses or chemical splash goggles are required. A face shield may also be appropriate depending on the specific application.

**Skin and Body Protection:** Laboratory coats must be worn and be appropriately sized for the individual and buttoned to their full length. Personnel must also wear full length pants, or equivalent, and close-toed shoes. Full length pants and close-toed shoes must be worn at all times by all individuals that are occupying the laboratory area. The area of skin between the shoe and ankle must not be exposed.

**Respiratory Protection:** Hexafluoropropanol should never be used outside of a chemical fume hood or glove box; therefore respiratory protection should not be required.

# **Section 4 – Special Handling and Storage Requirements**

* Do not over purchase; only purchase what can be safely stored in the laboratory.
* Avoid contact with skin, eyes, and clothing. Avoid inhalation of vapor or mist.
* Always use inside a chemical fume hood.
* Keep container upright and tightly closed in a dry and well-ventilated place. Containers should remain closed when not in use. A chemical storage cabinet is recommended.
* Containers which are opened must be carefully resealed and kept upright to prevent leakage.
* Keep away from incompatible materials: strong oxidizing agents, strong acids, strong bases, aluminum, zinc, and alkali metals.

Organic acid

Oxidizing acid

* Use in the smallest practical quantities for the experiment being performed.
* Containers should be labeled appropriately. Label should indicate the name of the chemical(s) in the container. Avoid using chemical abbreviations (acceptable if a legend is present in the lab) and formulae.

**Section 5 – Spill and Accident Procedures**

Immediately evacuate area and ensure others are aware of the spill. If there is an imminent threat of a fire, pull the nearest fire alarm station to evacuate the building and **dial 911**. If personnel have become exposed and need medical assistance, **dial 911**.

**Section 6 – Waste Disposal Procedures**

Store hazardous waste in closed containers that are properly labeled, and in a designated area (flammable cabinet is recommended) away from incompatible chemicals such as aqueous solutions. Complete a Chemical Waste Pickup Request Form to arrange for disposal by REM; detailed instructions are provided at the following link: <http://www.purdue.edu/ehps/rem/hmm/chemwaste.htm>.

**Section 7 – Protocol (Add lab specific Protocol here)**

Click here to enter text.

**NOTE:** Any deviation from this SOP requires approval from Principal Investigator.

**Section 8 – Documentation of Training (signature of all users is required)**

Prior to conducting any work with hexafluoropropanol, the Principal Investigator must ensure that all laboratory personnel receive training on the content of this SOP.

**I have read and understand the content of this SOP:**

| **Name** | **Signature** | **Date** |
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