Standard Operating Procedure

***Isopropyl formate***

*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
*Laboratory Safety Manual* and *Chemical Hygiene Plan*. Lab personnel intending to use/wear a respirator mask must be trained and fit-tested by ORS and should contact occhealt@uga.edu. This is a UGA requirement described in more detail in the [UGA Respiratory Protection Plan](https://esd.uga.edu/sites/default/files/respiratoryprotection.pdf) and supported by the [Office of Research Occupational Health and Safety Program](https://research.uga.edu/ohsp/).

Refer to instructions for assistance.

|  |  |
| --- | --- |
| **Department:** | Click here to enter text. |
| **Date SOP was written:** | Click here to enter a date. |
| **Date SOP was approved by PI/lab supervisor:** | Click here to enter a date. |
| **Principal Investigator:** | Click here to enter text. |
| **Internal Lab Safety Coordinator/Lab Manager:** | Click here to enter text. |
| **Lab Phone:** | Click here to enter text. |
| **Office Phone:** | Click here to enter text. |
| **Emergency Contact:** | Click here to enter text. |
| *(Name and Phone Number)* |
| **Location(s) covered by this SOP:** | Click here to enter text. |
| *(Building/Room Number)* |

**Type of SOP:** ☐ Process ☒Hazardous Chemical ☐ Hazardous Class

**Purpose**

(*State the procedure the specific chemical is used for in lab/the purpose of the chemical*)

**Physical & Chemical Properties/Definition of Chemical Group**

CAS#: 625-55-8

Class: Highly Flammable liquid and Irritant

Molecular formula: C4H8O2

Form (Physical State): Colorless liquid

Melting Point:N/A

Boiling Point: 68 °C (154 °F) - lit.

Flash Point: -13.9 °C (7.0 °F) - closed cup

Density: 0.884 g/cm3 at 25 °C (77 °F)



**Potential Hazards/Toxicity**

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness.

**Skin:** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** May be harmful if swallowed.

**Personal Protective Equipment (PPE)**

* *Respiratory protection:*Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
* Lab personnel intending to use/wear a respirator mask must be trained and fit-tested by ORS and should contact occhealt@uga.edu. This is a UGA requirement described in more detail in the [UGA Respiratory Protection Plan](https://esd.uga.edu/sites/default/files/respiratoryprotection.pdf) and supported by the [Office of Research Occupational Health and Safety Program](https://research.uga.edu/ohsp/).
* *Hand protection:*PVC or other plastic material gloves
* *Eye protection:*Face shield and safety glasses
* *Skin and body protection:*Choose body protection according to the amount and concentration of the dangerous substance at the work place.
* *Hygiene measures:*Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Engineering Controls**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**First Aid Procedures**

* *Inhalation*: Move person into fresh air. If not breathing give artificial respiration Consult a physician.
* *Ingestion*: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
* *Skin Contact*: Wash off with soap and plenty of water. Consult a physician.
* *Eye Contact*: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Special Handling and Storage Requirements**

**Precautions for safe handling:** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

**Conditions for safe storage:** Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

**Spill and Accident Procedure**

**Chemical Spill Dial 911**

**24-7 On-Call Response to Research, Environment, Health or Safety Concerns Dial 2-5561 from a campus phone or 706-542-5561 from a non-campus line.**

**Spill** – Follow the procedures set out in the [UGA Chemical and Laboratory Safety Manual.](http://research.uga.edu/docs/units/safety/manuals/Chemical-Laboratory-Safety-Manual.pdf)

[If there are any chemical-specific protocols for responding to a spill, insert them here or mark “none”:]

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**Medical Emergency Dial 911**

**Life Threatening Emergency, After Hours, Weekends And Holidays** – Dial **911** or the emergency phone numbers listed at the beginning of the UGA Chemical and Laboratory Safety Manual

*Note: All incidents that result in an injury or property damage must be reported to ORS / ESD using a University Incident/Accident Report.*

**Non-Life Threatening Emergency** – Follow the instructions in the UGA Chemical and Laboratory Safety Manual.

*Note: All incidents that result in an injury or property damage must be reported to ORS / ESD using a University Incident/Accident Report.*

**Decontamination/Waste Disposal Procedure**

**For general hazardous waste disposal procedures, see Appendix H of the UGA Chemical and Laboratory Safety Manual.**

Chemical Specific Procedures: [to be inserted or marked as “none”]

**Safety Data Sheet (SDS) Location**

UGA personnel can access Online SDS through a link in the upper left corner of the ESD home page (<https://esd.uga.edu>) and logging in by using their UGA email user name and password.

**Protocol/Procedure**

*(Add specific description of procedure.)*

**Note:** Any deviation from this SOP requires written approval from PI.

**Documentation of Training** *(signature of all users is required)*

* Prior to conducting any work with the chemical, designated personnel must provide training to his/her laboratory personnel specific to the hazards involved in working with this substance, work area decontamination, and emergency procedures.
* The Principal Investigator must provide his/her laboratory personnel with a copy of this SOP and access to the SDS provided by the manufacturer.
* The Principal Investigator must ensure that his/her laboratory personnel have attended appropriate laboratory safety training or refresher training within the last 12 months.

**Principal Investigator SOP Approval**

Print name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Approval Date:

I have read and understand the content of this SOP:

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