

Isopropyl ethyl thionocarbamate MSDS

Disclaimer: This Material Safety Data Sheet (MSDS) is provided as a guide for trained personnel. The information herein is believed to be accurate and represents the best data currently available. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. The user assumes all responsibility for personal injury or property damage caused by the material.

1. Product Name and Identification

- **Product Name:** [Isopropyl ethyl thionocarbamate](#)
- **CAS Number:** 141-98-0
- **Synonyms:** O-Isopropyl N-ethyl thionocarbamate; IPETC
- **Chemical Formula:** C₆H₁₃NOS

2. Composition/Ingredients

- **Chemical Name:** Isopropyl ethyl thionocarbamate
- **Concentration:** Typically ≥95%
- **Hazardous Component:** Yes

3. Hazards Identification

- **Physical Hazards:** Combustible liquid. Can burn if exposed to a strong ignition source.
- **Health Hazards:** Harmful if swallowed. Causes skin irritation. May cause serious eye irritation. Inhalation of mist or vapor may cause respiratory tract irritation.
- **Environmental Hazards:** Harmful to aquatic life. Avoid release into the environment, as long-term adverse effects are possible.

4. First Aid Measures

- **Inhalation:** Relocate the exposed individual to fresh air. If breathing is labored or symptoms such as coughing or irritation persist, seek medical attention.
- **Skin Contact:** Immediately remove all contaminated clothing. Wash the affected skin area thoroughly with soap and water for at least 15 minutes. If skin irritation occurs, consult a physician.
- **Eye Contact:** Immediately flush eyes with a gentle but large stream of water for at least 15 minutes, holding the eyelids apart to ensure complete irrigation of the eye surface. If irritation persists, seek immediate medical attention.
- **Ingestion:** Do NOT induce vomiting. If the person is conscious, rinse their mouth out with water. Contact a poison control center or physician for treatment advice. Never give anything by mouth to an unconscious person.

5. Handling and Storage

- **Handling:** Use in a well-ventilated area. Keep away from heat, sparks, and open flames. Avoid breathing vapors or mists. Prevent contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands thoroughly after handling.
- **Storage:** Store in a cool, dry, well-ventilated location away from sources of heat and ignition. Keep containers tightly sealed and properly labeled. Store separately from incompatible materials such as strong oxidizing agents and acids.

6. Exposure Controls/Personal Protection

- **Exposure Limits:** Consult local and national authorities for specific occupational exposure limits.
- **Engineering Controls:** Provide adequate general and local exhaust ventilation to maintain airborne concentrations below any established exposure limits. Ensure that eyewash stations and safety showers are readily available in the immediate work area.
- **Personal Protective Equipment (PPE):**
 - **Eye/Face Protection:** Wear chemical safety goggles to protect against splashes.
 - **Skin Protection:** Wear chemically resistant gloves (e.g., nitrile rubber, neoprene), a lab coat, or an apron to prevent skin exposure.
 - **Respiratory Protection:** If ventilation is insufficient to control exposure, use a NIOSH-approved respirator with an organic vapor cartridge.

7. Physical and Chemical Properties

- **Appearance:** Pale yellow to dark brown oily liquid
- **Odor:** Mild, characteristic odor
- **Boiling Point:** Approximately 206°C (403°F)
- **Melting Point:** Not applicable (liquid at room temperature)
- **Flash Point:** Approximately 82°C (180°F) (Closed Cup)
- **Solubility:** Insoluble in water; soluble in many organic solvents.
- **Specific Gravity:** Approximately 0.994 g/cm³ @ 20°C (68°F)

8. Stability and Reactivity

- **Stability:** Stable under normal conditions of use and storage.
- **Reactivity:** Can react with strong oxidizing agents.
- **Conditions to Avoid:** Exposure to high temperatures, open flames, sparks, and other ignition sources. Contact with incompatible materials.
- **Incompatible Materials:** Strong oxidizers and strong acids.

- **Hazardous Decomposition Products:** Upon combustion or thermal decomposition, may produce toxic gases such as carbon oxides (CO, CO₂), nitrogen oxides (NO_x), and sulfur oxides (SO_x).

9. Toxicological Information

- **Acute Effects:**
 - **Oral:** Harmful if ingested. May cause nausea, vomiting, and abdominal pain.
 - **Dermal:** Causes skin irritation. Can be absorbed through the skin, but systemic toxicity via this route is low.
 - **Inhalation:** Inhaling mists or vapors may cause irritation to the nose, throat, and lungs.
 - **Eyes:** Contact may cause significant irritation, redness, and pain.
- **Chronic Effects:** Prolonged or repeated skin contact may lead to dermatitis (skin rash). No other significant chronic effects have been identified from available data.

10. Disposal Considerations

- **Disposal Method:** The disposal of this product and its container must be conducted in compliance with all applicable federal, state, and local regulations. Do not allow this material to enter drains, sewers, or waterways. It should be handled by a licensed professional waste disposal service. The combustibility of the material should be considered. Contaminated packaging must be disposed of in the same manner as the unused product.