

Sodium Isopropyl Xanthate - MSDS

1. Product Name and Identification

Product Name: [Sodium Isopropyl Xanthate](#)

Chemical Formula: C₄H₇NaOS₂

Synonyms: SIPX, Sodium 2-Propanol Xanthate

CAS Number: 140-93-2

Manufacturer/Supplier: [Insert Manufacturer Name]

Emergency Contact Information: [Insert Emergency Contact Details]

2. Composition/Ingredients

Substance: Sodium Isopropyl Xanthate

Chemical Name: Sodium Isopropyl Xanthate

CAS Number: 140-93-2

Percent by Weight: ≥ 90%

3. Hazards Identification

GHS Classification:

- Flammable solid (Category 2)
- Skin irritation (Category 2)
- Eye irritation (Category 2A)
- Specific target organ toxicity - Single Exposure (Category 3, Respiratory system)

Signal Word: Warning

Hazard Statements:

- H228: Flammable solid.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.

Precautionary Statements:

- P210: Keep away from heat, flames, and hot surfaces.
- P261: Avoid breathing dust or fumes.
- P280: Wear protective gloves, clothing, and eye protection.
- P301+P312: If swallowed, call a doctor if you feel unwell.
- P305+P351+P338: If in eyes, rinse cautiously with water. Remove contact lenses if present and easy to do.

Potential Health Effects:

- **Eye Contact:** May cause redness and irritation.
- **Skin Contact:** Prolonged exposure may result in dryness or irritation.
- **Inhalation:** Dust or fumes may irritate the respiratory system. Extended exposure may cause dizziness.
- **Ingestion:** May result in nausea, abdominal pain, or gastrointestinal discomfort.

4. First Aid Measures

General Advice: Immediate medical attention is advised if symptoms persist.

- **Eye Contact:** Rinse eyes with plenty of water for at least 15 minutes. Remove contact lenses and consult a physician.
- **Skin Contact:** Wash thoroughly with soap and water. Remove contaminated clothing. Seek medical advice if irritation continues.
- **Inhalation:** Move to fresh air immediately. If breathing difficulties occur, consult a healthcare professional.
- **Ingestion:** Rinse the mouth thoroughly with water. Do *not* induce vomiting. Call a poison control center or doctor promptly.

5. Handling and Storage

Handling:

- Avoid creating or inhaling dust.
- Use in well-ventilated areas. Prevent contact with skin, eyes, and clothing.
- Keep away from open flames, sparks, and other sources of ignition.

Storage:

- Store in tightly sealed containers in a dry, well-ventilated place.
- Avoid exposing the material to moisture, heat, or incompatible chemicals such as strong acids or oxidizers.

6. Exposure Controls/Personal Protection

Exposure Limits: No specific exposure limits established.

Engineering Controls:

- Provide adequate ventilation to minimize dust accumulation. Use local exhaust when in enclosed spaces.

Personal Protective Equipment (PPE):

- **Eye Protection:** Safety goggles or face shield.
- **Skin Protection:** Chemical-resistant gloves (e.g., butyl or nitrile rubber).
- **Respiratory Protection:** Use an appropriate respirator if dust levels exceed permissible exposure levels.
- **Clothing:** Wear full-length protective clothing to prevent skin contact.

7. Physical and Chemical Properties

- **Appearance:** Yellowish powder or pellet form
- **Odor:** Faint sulfur-like smell
- **Boiling Point:** Decomposes before boiling
- **Melting Point:** Decomposes at high temperature
- **Flash Point:** Not applicable
- **Density:** 1.3–1.4 g/cm³
- **Vapor Pressure:** Negligible at room temperature
- **Solubility:** Soluble in water
- **pH:** 8–10 (aqueous solution)

8. Stability and Reactivity

Chemical Stability: Stable under typical handling and storage conditions.

Conditions to Avoid:

- Exposure to moisture, heat, and open flames.
- Avoid dust accumulation near ignition sources.

Materials to Avoid:

- Strong acids, oxidizing agents, and reactive metals.

Hazardous Decomposition Products:

- Upon decomposition, may release toxic fumes of carbon disulfide, sulfur dioxide, and other sulfur-containing compounds.

9. Toxicological Information

Acute Toxicity:

- **Oral LD50 (Rat):** Approximately 400–500 mg/kg
- **Dermal LD50 (Rabbit):** > 1,000 mg/kg

Chronic Effects:

- Repeated or prolonged exposure may cause skin sensitization or respiratory irritation.

Irritation Properties:

- Causes irritation to eyes, skin, and the respiratory system upon contact or inhalation.

Symptoms of Exposure:

- Temporary dizziness, cough, breathing difficulty, or redness in skin and eyes after exposure.

10. Disposal Considerations

Waste Disposal Methods:

Dispose of material and container in accordance with local, regional, and national regulations. Do not discharge into waterways, sewer systems, or the environment. Contact a licensed waste disposal service for appropriate disposal.

Container Handling:

Thoroughly rinse containers and do not reuse. Treat all containers as hazardous waste to ensure safety during disposal.