

Sodium Dimethyldithiocarbamate MSDS

1. Product Name and Identification

Product Name: [Sodium Dimethyldithiocarbamate](#)

Synonyms: Sodium Dimethyldithiocarbamic Acid Salt, SDMC

CAS Number: 128-04-1

Recommended Uses: Industrial water treatment, Biocide, Pesticide intermediate

Manufacturer/Distributor Details:

- **Name:** [Insert Manufacturer/Distributor Name]
 - **Address:** [Insert Address]
 - **Emergency Contact Number:** [Insert Contact Number]
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2. Composition/Ingredients

Substance/Preparation: Substance

Chemical Name: Sodium Dimethyldithiocarbamate

CAS Number: 128-04-1

Percent Composition: $\geq 97\%$

3. Hazards Identification

Classification of the Substance or Mixture:

- **Acute Toxicity (Oral):** Category 4
- **Skin Corrosion/Irritation:** Category 2
- **Eye Damage/Irritation:** Category 2A
- **Aquatic Toxicity (Acute):** Category 1
- **Aquatic Toxicity (Chronic):** Category 1

Hazard Statements:

- Harmful if swallowed.
- Causes skin and eye irritation.
- Very toxic to aquatic life with long-lasting effects.

Precautionary Statements:

- Avoid release into the environment.

- Wash hands thoroughly after handling.
- Wear protective gloves and eye protection.
- Do not eat, drink, or smoke while using this product.

Pictograms:

- [Insert placeholders for exclamation mark and environmental hazard pictograms]

Additional Notes: Prolonged exposure to high concentrations may cause additional irritation to sensitive individuals.

4. First Aid Measures

General Information: Seek immediate medical attention if symptoms occur. Avoid further exposure.

Eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing and seek medical advice.

Skin: Wash the affected area thoroughly with soap and water. Remove contaminated clothing and wash before reuse. If irritation persists, seek medical attention.

Inhalation: Move person to fresh air. If breathing difficulties develop, administer oxygen and seek medical advice.

Ingestion: Do NOT induce vomiting. Rinse mouth with water. Drink plenty of water and seek immediate medical attention.

Important Notes for Physicians: Treatment should focus on relieving symptoms.

5. Handling and Storage

Handling:

- Avoid inhalation of dust or vapors.
- Avoid skin and eye contact.
- Handle in well-ventilated areas.
- Use appropriate personal protective equipment (PPE).

Storage:

- Store in a cool, dry, and well-ventilated place.
 - Keep container tightly closed.
 - Store away from incompatible materials such as strong acids and oxidizing agents.
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6. Exposure Controls/Personal Protection

Engineering Controls:

- Provide adequate ventilation to maintain airborne concentrations below recommended exposure limits.

Personal Protection Equipment (PPE):

- **Eye Protection:** Safety goggles or face shield.
- **Skin Protection:** Chemical-resistant gloves (e.g., nitrile, rubber).
- **Respiratory Protection:** Use an approved respirator if ventilation is inadequate.
- **Other:** Wear protective clothing to minimize skin contact.

Hygiene Measures:

- Wash hands and face after handling.
- Remove and wash contaminated clothing before reuse.

Workplace Exposure Limits:

- No specific OSHA or ACGIH exposure limits are established. Use general good industrial hygiene practices.
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7. Physical and Chemical Properties

- **Appearance:** Light yellow crystalline or powdered solid
- **Odor:** Faint sulfur-like smell
- **Melting Point:** Approximately 92°C
- **Boiling Point:** Not applicable
- **Flash Point:** Non-flammable
- **Solubility:** Soluble in water
- **Density:** Approx. 1.3 g/cm³
- **pH (1% solution):** 9.0–11.0
- **Vapor Pressure:** Negligible at room temperature
- **Molecular Formula:** C₃H₆NNaS₂
- **Molecular Weight:** 143.2 g/mol

- **Flammability:** Not flammable
 - **Explosive Properties:** Not explosive
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8. Stability and Reactivity

Chemical Stability: Stable under standard storage and usage conditions.

Conditions to Avoid: Excessive heat, moisture, and exposure to incompatible materials.

Materials to Avoid: Strong acids, strong oxidizing agents.

Hazardous Decomposition Products: May release toxic fumes including sulfur oxides, nitrogen oxides, and carbon oxides in case of decomposition.

Polymerization: Will not occur under normal handling and storage conditions.

9. Toxicological Information

Acute Toxicity:

- Oral LD50 (Rat): Approximately 1500 mg/kg

Skin Corrosion/Irritation: May cause moderate irritation upon prolonged or repeated contact.

Eye Damage/Irritation: May cause redness, watering, and irritation upon contact.

Respiratory Effects: Prolonged inhalation of dust may cause irritation to the respiratory tract.

Chronic Effects: Prolonged or repeated exposure may cause mild irritation or sensitization effects.

Carcinogenicity: Not classified as carcinogenic by IARC, NTP, or OSHA.

Other Information: Handle carefully to avoid prolonged exposure to any dust or residues that may irritate.

10. Disposal Considerations

Waste Disposal Methods:

- Dispose of this product as hazardous waste following local, state, and federal regulations.
- Do not allow product to enter drains, watercourses, or the environment.

Packaging Disposal:

- Containers should be triple rinsed and disposed of in accordance with disposal regulations.

Environmental Precautions: Sodium Dimethyldithiocarbamate is highly toxic to aquatic life. Ensure all disposal efforts do not impact natural water systems.
