

2-Ethylhexanol MSDS

1. Product Name and Identification

Product Name: [2-Ethylhexanol](#)

CAS Number: 26952-21-6

Synonyms: Isooctanol, Ethylhexyl Alcohol, Octyl Alcohol

Recommended Use: Used in the production of plasticizers, coatings, solvents, and other industrial applications.

Restrictions on Use: Not for use in food, drug, or cosmetic applications.

2. Composition/Ingredients

Chemical Name: 2-Ethylhexanol

Molecular Formula: C₈H₁₈O

Molecular Weight: 130.23 g/mol

Concentration: 100% (pure substance)

3. Hazards Identification

Classification of the Substance:

- **Health Hazards:**
 - Can cause eye and skin irritation.
 - Harmful if swallowed or inhaled.
 - May cause respiratory irritation.

GHS Signal Word: Warning

Hazard Statements:

- H315: Causes skin irritation
- H319: Causes serious eye irritation
- H332: Harmful if inhaled
- H335: May cause respiratory irritation

Precautionary Statements:

- P261: Avoid breathing vapors or mist.
- P264: Wash thoroughly after handling.
- P280: Wear protective gloves, clothing, and eye/face protection.

- P302 + P352: If on skin, wash with plenty of soap and water.
- P305 + P351 + P338: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

4. First Aid Measures

- **Eyes:** Rinse eyes gently with water for at least 15 minutes, making sure to flush under the eyelids. Seek medical attention if irritation occurs.
- **Skin:** Wash thoroughly with soap and water. Remove any contaminated clothing and wash it before reuse. If irritation persists, seek medical advice.
- **Inhalation:** Move to fresh air. If breathing is difficult, administer oxygen and seek medical help.
- **Ingestion:** Rinse mouth with water. Do not induce vomiting. Get medical assistance immediately.

5. Handling and Storage

Handling:

- Handle in a well-ventilated area.
- Avoid contact with skin, eyes, and clothing.
- Minimize vapor exposure. Do not breathe mist or vapors.

Storage:

- Store in a cool, dry, and well-ventilated environment.
- Keep container sealed and away from sources of ignition, heat, and direct sunlight.
- Avoid storing near incompatible materials such as strong oxidizers.

6. Exposure Controls/Personal Protection

Exposure Limits:

- OSHA PEL and ACGIH TLV have not been established for this substance.

Engineering Controls:

- Use local exhaust to maintain airborne concentrations below permissible exposure limits.

Personal Protective Equipment (PPE):

- **Eye/Face Protection:** Safety glasses with side shields or chemical safety goggles.
- **Skin Protection:** Wear chemical-resistant gloves and protective clothing.
- **Respiratory Protection:** Use a properly fitted respirator if ventilation is inadequate or exposure limits are exceeded.

7. Physical and Chemical Properties

Appearance: Clear, colorless liquid

Odor: Mild, characteristic alcohol-like aroma

Odor Threshold: Not available

pH: Not applicable

Boiling Point: ~185 °C (365 °F)

Melting Point: ~-76 °C (-105 °F)

Flash Point: ~77 °C (171 °F, closed cup)

Solubility: Slightly soluble in water; miscible with most organic solvents

Density: ~0.83 g/cm³ at 25 °C

Vapor Pressure: ~0.1 mmHg at 20 °C

Refractive Index: ~1.429 at 20 °C

8. Stability and Reactivity

Reactivity: Not highly reactive under normal conditions.

Stability: Stable under recommended storage conditions.

Hazardous Reactions: None known under standard use.

Conditions to Avoid: Avoid high temperatures, open flames, and incompatible materials such as strong oxidizing agents.

Decomposition Products: Carbon oxides (CO, CO₂) when subjected to high temperatures or combustion.

9. Toxicological Information

Acute Toxicity:

- **Oral (LD50):** ~2040 mg/kg (rat)
- **Dermal (LD50):** ~1980 mg/kg (rabbit)
- **Inhalation (LC50):** Not available

Health Effects:

- Exposure to vapors or skin contact can lead to irritation.
- Prolonged breathing of vapors may cause respiratory discomfort.

Chronic Exposure: Prolonged or repeated skin exposure may lead to dryness or dermatitis.

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

10. Disposal Considerations

Waste Treatment Methods:

- Dispose of in accordance with all applicable local, regional, and national regulations.
- Do not dispose of into the environment or release into sewers or waterways.
- Consult with a licensed waste disposal provider for proper handling and disposal.

Disclaimer: This MSDS is provided as a guideline for safe handling and use of the product. Specific conditions of use and handling may vary and are the user's responsibility to determine compliance with applicable regulations.