

Safety Data Sheet: 2-Ethylhexanol

1. Identification

Product	2-Ethylhexanol; CAS 104-76-7; EC 203-234-3
Use	Industrial plasticizer, acrylate and chemical intermediate manufacture.
Company	Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)
Address	Room 1001, Building A, Caohejing Center, No. 1520 Gumei Road, Xuhui District, Shanghai, China
Telephone / email	+86-21-54265599 / sales@zxchem.com.cn
Emergency contact	ZXCHEM office number above, office hours, China time (UTC+8). For urgent medical assistance contact local emergency services.
Scope	Reference safety information for 2-Ethylhexanol. The reference composition, concentration and supply-grade differences are described in Section 3. This document does not certify the composition or transport status of a specific delivered batch or a different formulation.

2. Hazards Identification

Classification	Flammable liquid Category 4; acute inhalation toxicity Category 4; skin irritation Category 2; eye irritation Category 2A; STOT single exposure Category 3, respiratory irritation; aquatic acute and chronic Category 3.
Signal word / symbols	Warning; GHS07
Hazard statements	H227: combustible liquid. H332: harmful if inhaled. H315: skin irritation. H319: serious eye irritation. H335: respiratory irritation. H412: harmful to aquatic life with persistent effects.
Prevention	Use adequate ventilation; avoid inhaling mist. Prevent skin and eye contact. Wear suitable chemical-resistant gloves and eye protection. Wash after handling; keep food and drink out of the work area.
Response	After exposure, stop work and seek medical advice. For severe exposure obtain urgent medical care. Rinse contaminated skin or eyes with water; move an inhalation casualty to fresh air.
Environment	Prevent uncontrolled release to drains, soil or surface water. Collect spills for appropriate disposal.



3. Composition / Information on Ingredients

Reference ingredient	2-Ethylhexanol, CAS 104-76-7. high-purity reference ≥99.6%; ZXCHEM supply TDS ≥99.50%. Reference purity is not a delivered-batch analysis.
Supply grade	Purity ≥99.50%
Applicability	The cited concentration or purity describes the reference material. It is not a certificate of analysis for the delivered batch; different solvents or dilutions require the matching supplier safety document.

4. First-Aid Measures

General	Protect the rescuer from exposure and show the product information to medical personnel. Obtain medical advice if symptoms occur or exposure is significant.
Inhalation	Move to fresh air and keep the person comfortable. Seek medical care for breathing difficulty or persistent symptoms. Avoid exposing rescuers to mist.
Skin	Remove contaminated clothing and rinse skin thoroughly with water. Seek medical advice for persistent irritation.
Eyes	Rinse gently with clean water for at least 15 minutes. Remove contact lenses when easy and continue rinsing. Seek medical advice if irritation persists.
Ingestion	Rinse the mouth. Do not induce vomiting. Give nothing by mouth to an unconscious person. Obtain medical advice.
Effects / treatment	Vapors or mist may irritate airways and cause headache or dizziness; direct contact irritates skin and eyes. Treatment is symptomatic and directed by a clinician.

5. Fire-Fighting Measures

Extinguishing media	Use foam, dry powder or carbon dioxide for liquid fires. Cool exposed containers with water spray; firefighters require self-contained breathing equipment.
Hazards	Carbon oxides and smoke. Heated containers may rupture; vapor/air mixtures can ignite.
Protection	Firefighters require suitable protective clothing and self-contained breathing equipment. Prevent contaminated firefighting water entering drains.

6. Accidental Release Measures

Personnel	Isolate the spill and provide ventilation. Use chemical-resistant gloves and eye protection; avoid contact and mist exposure.
Environment	Contain the release and protect drains and waterways. Report significant environmental contamination to the responsible authority.
Cleanup	Stop the leak if safe. Absorb liquid with a compatible inert material and collect in closed labelled containers. Do not wash into drains.

7. Handling and Storage

Handling	Use controlled transfer and effective ventilation. Avoid generating mist and prevent contamination of the work area.
Storage	Store tightly closed in a cool, dry, ventilated area, away from heat, sparks and flame. Separate from strong oxidizers, strong acids and strong bases.
Incompatibilities	Strong oxidizers, strong acids and strong bases.
Specific use	Evaluate compatibility and appropriate operating conditions in the complete formulation before industrial use.

8. Exposure Controls / Personal Protection

Exposure limits	Apply local occupational limits and control organic vapor or mist. The selected references do not establish a universally applicable exposure limit.
Engineering controls	Use local extraction where mist can be generated. Maintain accessible eyewash and emergency washing facilities.
Personal protection	Wear chemical-resistant gloves selected for the task, suitable protective clothing and splash goggles. Add face protection for splash-prone tasks.
Respiratory protection	Use a properly selected respirator under a respiratory-protection program where engineering controls do not adequately limit airborne exposure.
Hygiene	Wash after handling, remove contaminated clothing promptly and do not eat, drink or smoke in the work area.

9. Physical and Chemical Properties

Appearance	Clear, colorless to pale yellow liquid
Formula / molecular weight	C ₈ H ₁₈ O / 130.23 g/mol
Boiling point, reference	184°C at 760 mmHg
Flash point, reference	77°C
Density, reference	0.833 g/cm ³
Viscosity, reference	10 mPa·s at 20°C
Other properties	Product-specific values for odor threshold, vapor pressure, partition coefficient, autoignition temperature and viscosity are not supplied by the selected reference set. No values are inferred.

10. Stability and Reactivity

Stability	Stable under recommended storage conditions.
Conditions to avoid	Heating, flames, sparks, static discharge and incompatible products.
Incompatibilities	Strong oxidizers, strong acids and strong bases.
Decomposition	Carbon oxides and smoke on combustion.

11. Toxicological Information

Exposure effects	Vapors or mist may irritate airways and cause headache or dizziness; direct contact irritates skin and eyes.
Reference classification	Flammable liquid Category 4; acute inhalation toxicity Category 4; skin irritation Category 2; eye irritation Category 2A; STOT single exposure Category 3, respiratory irritation; aquatic acute and chronic Category 3.
Toxicological data	reference oral rat LD50: 3,290 mg/kg; dermal rabbit LD50 >3,000 mg/kg. Inhalation and irritation categories follow the selected reference.

12. Ecological Information

Environmental effects	reports aquatic acute/chronic Category 3. Avoid discharge and collect liquid spills for authorized waste treatment.
Controls	Prevent uncontrolled release, collect spills and dispose of contaminated material through an authorized route.
Assessment	No product-specific PBT/vPvB assessment is claimed. Absence of data does not establish absence of environmental effects.

13. Disposal Considerations

Product	Collect surplus product and contaminated cleanup material for disposal by an authorized chemical-waste contractor in accordance with local requirements.
Packaging	Containers may retain product residues. Do not reuse contaminated packaging without an approved cleaning process; use an authorized disposal route.

14. Transport Information

Classification	Class 9 (IATA); Non-dangerous goods (IMDG)
UN number	IATA: UN 3334; IMDG: not assigned
Shipping name	IATA: Aviation regulated liquid, n.o.s. (2-ethylhexan-1-ol); IMDG: not regulated
Class / packing group	IATA Class 9, packing group III. IMDG: non-dangerous goods. U.S. bulk combustible-liquid provisions can apply; the supplement gives NA 1993, packing group III for bulk road supply.
Transport precautions	Protect packaging and closures from damage, secure loads and prevent releases. This reference is not a shipping declaration for a specific consignment.

15. Regulatory Information

Identity	2-Ethylhexanol; CAS 104-76-7; EC 203-234-3
HS reference	290516; reference heading rather than a destination customs ruling.
Compliance	Apply applicable workplace, environmental and transport rules. A raw-material listing does not establish finished-product authorization.
Assessment	No ZXCHEM-specific chemical safety assessment or destination registration is asserted.

16. Other Information

Hazard meanings	H227: combustible liquid. H332: harmful if inhaled. H315: skin irritation. H319: serious eye irritation. H335: respiratory irritation. H412: harmful to aquatic life with persistent effects.
Limitations	Prepared as reference safety information for the identified material. It is not a batch analytical certificate or safety assessment of a different solvent-containing formulation.
Revision	2026.2; prepared 2026-10-06. Customer-document branding and title corrected; technical safety data retained.
Document scope	Reference safety information for the material and grade described in Sections 1 and 3. Different concentrations, solvents or formulations require the applicable safety information. This is not a batch analytical certificate.

Revision: 2026.2 | Revision date: 2026-10-06