

# SAFETY DATA SHEET



Revision date: 02-May-2024

Revision Number 8

## Section 1: Identification

### Product identifier

**Product Name** 2-ETHYL HEXANOL

**Product Code(s)** 000030445401

### Other means of identification

**CAS No.** 104-76-7

**Synonyms** 2-Ethylhexanol; 2-Ethyl hexyl alcohol; D-Foam.

### Recommended use of the chemical and restrictions on use

**Recommended use** Solvent.

**Uses advised against** No information available.

### Details of manufacturer or importer

#### **Supplier**

Ixom Operations Pty Ltd  
ABN: 51 600 546 512  
Level 8, 1 Nicholson Street  
Melbourne 3000  
Australia

Telephone Number: +61 3 9906 3000

### Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## Section 2: Hazard identification

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).  
Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

### GHS Classification

<b>Flammable liquids</b>	Category 4
<b>Acute toxicity - Inhalation (Dusts/Mists)</b>	Category 4
<b>Skin corrosion/irritation</b>	Category 2
<b>Serious eye damage/eye irritation</b>	Category 2
<b>Specific target organ toxicity (single exposure)</b>	Category 3

### Label elements

Exclamation mark



**Signal word**  
WARNING

**Hazard statements**

H227 - Combustible liquid  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H332 - Harmful if inhaled  
H335 - May cause respiratory irritation

**Precautionary Statements - Prevention**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Avoid breathing dust/fume/gas/mist/vapors/spray.  
Wash face, hands and any exposed skin thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/clothing and eye/face protection.  
Avoid release to the environment.

**Precautionary Statements - Response**

Specific treatment (see First aid on this SDS).  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of soap and water.  
Call a POISON CENTER or doctor/physician if you feel unwell.  
Wash contaminated clothing before reuse.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Call a POISON CENTER or doctor/physician if you feel unwell.  
Rinse mouth.  
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.  
In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish..

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed.  
Store in a well-ventilated place. Keep cool.  
Store locked up.

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

**Other hazards which do not result in classification**

May be harmful if swallowed.  
Harmful to aquatic life.

### Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
2-Ethyl hexanol	104-76-7	>99.5%

### Section 4: First aid measures

**Description of first aid measures**

**General advice**

Show this safety data sheet to the doctor in attendance. For advice, contact a Poisons

Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

<b>Inhalation</b>	Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. (Call a physician if symptoms occur).
<b>Ingestion</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur. Clean mouth with water and drink afterwards plenty of water.
<b>Self-protection of the first aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8).

#### **Most important symptoms and effects, both acute and delayed**

**Symptoms** Irritating. Erythema (skin redness). May cause redness and tearing of the eyes. Coughing and/ or wheezing. Difficulty in breathing. Irritation.

**Effects of Exposure** No information available.

#### **Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically. No known specific antidote.

### **Section 5: Firefighting measures**

#### **Suitable Extinguishing Media**

**Suitable extinguishing media** Dry chemical, CO<sub>2</sub>, water spray or regular foam.

**Unsuitable extinguishing media** High volume water jet.

#### **Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** Combustible liquid. Most vapors are heavier than air. Vapors may spread along ground and collect in low or confined areas (sewers, basements, tanks). May form explosive mixtures with air. Pay attention to flashback. In the event of fire, cool tanks with water spray.

**Hazardous combustion products** Carbon oxides.

#### **Special protective actions for fire-fighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

### **Section 6: Accidental release measures**

#### **Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate

ventilation. Evacuate personnel to safe areas. Do not touch or walk through spilled material. Use personal protective equipment as required. Wash thoroughly after handling. Take precautionary measures against static discharges.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

### Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

### Methods and material for containment and cleaning up

**Methods for containment** Dike to collect large liquid spills.

**Methods for cleaning up** Dike to collect large liquid spills. Avoid breathing dust or spray mist. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Do not return spilled material to original container. Use non-sparking tools. For large amounts, pump off product.

## Section 7: Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges. Use personal protection equipment. Wash thoroughly after handling. Ground and bond all lines and equipment associated with product system. All equipment should be non-sparking. All equipment may need to be explosion-proof based on a risk assessment.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Avoid breathing vapors or mists. Wash hands and face before breaks and immediately after handling the product. When using do not eat, drink or smoke.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep container closed when not in use.

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements. Store away from sources of heat or ignition.

**Incompatible materials** Strong oxidizing agents. Strong acids.

## Section 8: Exposure controls and personal protection

### Control parameters

#### Exposure Limits

Chemical name	Australia	New Zealand	ACGIH TLV
2-Ethyl hexanol 104-76-7	-	-	TWA: 5 ppm

Chemical name	European Union	United Kingdom	Germany DFG
2-Ethyl hexanol	-	TWA: 1 ppm	TWA: 10 ppm

104-76-7		TWA: 5.4 mg/m <sup>3</sup> STEL: 3 ppm STEL: 16.2 mg/m <sup>3</sup>	TWA: 54 mg/m <sup>3</sup> Peak: 10 ppm Peak: 54 mg/m <sup>3</sup>
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2-Ethyl hexanol: 8hr TWA = 200 ppm (recommended standard)

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

**Appropriate engineering controls**

**Engineering controls** Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

**Individual protection measures, such as personal protective equipment**

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.



<b>Eye/face protection</b>	Goggles.
<b>Skin and body protection</b>	Wear suitable protective clothing. Long sleeved clothing. Boots. Overalls.
<b>Hand protection</b>	Impervious gloves.
<b>Respiratory protection</b>	If determined by a risk assessment an inhalation risk exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
<b>Environmental exposure controls</b>	No information available.
<b>Thermal hazards</b>	No information available.

**Section 9: Physical and chemical properties**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Appearance</b>	No information available
<b>Color</b>	Colourless
<b>Odor</b>	Alcohol -like

Odor threshold Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	7	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	-89°C	None known
Boiling point / boiling range	186°C	None known
Flash point	75°C	CC (closed cup)
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	12.7%	
Lower flammability or explosive limits	1.1%	
Vapor pressure	<1 hPa @20°C	None known
Vapor density	4.49 (air=1.0)	None known
Relative density	0.832 @20°C	None known
Water solubility	0.9 g/l @ 20 °C	None known
Solubility(ies)	No data available	None known
Partition coefficient	n-octanol/water, log Pow = 2.9 (25°C; pH = 7)	None known
Autoignition temperature	280°C	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	9.845 mPa.s @20°C	None known

#### Other information

## **Section 10: Stability and reactivity**

### Reactivity

Reactivity No information available.

### Chemical stability

Stability Stable under normal conditions.

### Explosion data

Sensitivity to mechanical impact None.  
Sensitivity to static discharge None.

### Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

### Conditions to avoid

Conditions to avoid Heat, flames and sparks.

### Incompatible materials

Incompatible materials Strong oxidizing agents. Strong acids.

### Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

## Section 11: Toxicological information

### Information on likely routes of exposure

<b>Product Information</b>	No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:
<b>Inhalation</b>	Irritating to respiratory system. Harmful by inhalation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Skin contact</b>	Causes skin irritation.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Symptoms</b>	Irritating. Erythema (skin redness). May cause redness and tearing of the eyes. Coughing and/ or wheezing. Difficulty in breathing. Irritation.

### Acute toxicity

#### Numerical measures of toxicity - Product Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-Ethyl hexanol	= 3730 mg/kg ( Rat )	= >3000 mg/kg ( Rat )	> 227 ppm ( Rat ) 6 h

See section 16 for terms and abbreviations

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	Not a skin sensitizer. (human).
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not listed as carcinogenic according to IARC. (IARC - International Agency for Research on Cancer).
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	May cause respiratory irritation.
<b>STOT - repeated exposure</b>	Not classified.

**Aspiration hazard** No information available.

## Section 12: Ecological information

### Ecotoxicity

**Aquatic ecotoxicity** Harmful to aquatic life. Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
2-Ethyl hexanol	EC50: =11.5mg/L (72h, <i>Desmodesmus subspicatus</i> )	LC50: 32 - 37mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: >7.5mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: 27 - 29.5mg/L (96h, <i>Pimephales promelas</i> ) LC50: =29.7mg/L (96h, <i>Pimephales promelas</i> ) LC50: 10.0 - 33.0mg/L (96h, <i>Lepomis macrochirus</i> )	-	EC50: =39mg/L (48h, <i>Daphnia magna</i> )

**Terrestrial ecotoxicity** There is no data for this product.

### Persistence and degradability

**Persistence and degradability** No information available.

### Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

### Component Information

Chemical name	Partition coefficient
2-Ethyl hexanol	2.9

### Mobility

**Mobility** No information available.

### Other adverse effects

**Other adverse effects** No information available.

## Section 13: Disposal considerations

### Waste treatment methods

**Contaminated packaging** Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.



See section 8 for more information

## Section 14: Transport information

<b>ADG</b>	Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.
<b>IATA</b>	Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.
<b>IMDG</b>	Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available

## Section 15: Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulations

##### Australia

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).  
Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

See section 8 for national exposure control parameters

#### **Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)**

No poisons schedule number allocated

**Poison Schedule Number** Not applicable

#### **Australian Industrial Chemicals Introduction Scheme (AICIS)**

Contact supplier for inventory compliance status

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
2-Ethyl hexanol - 104-76-7	Present	-

#### **Illicit Drug Precursors/Reagents**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

#### **National pollutant inventory**

Subject to reporting requirement

Chemical name	National pollutant inventory
2-Ethyl hexanol - 104-76-7	20 MWh Threshold category 2b total 60000 MWh Threshold category 2b total 1 tonne/h Threshold category 2a total 25 tonne/yr Threshold category 1a total

	400 tonne/yr Threshold category 2a total 2000 tonne/yr Threshold category 2b total
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**International Inventories**

<b>AIIC</b>	This material is listed on the Australian Inventory of Industrial Chemicals.
<b>NZIoC</b>	This material is listed on the New Zealand Inventory of Chemicals.
<b>TSCA</b>	Contact supplier for inventory compliance status.
<b>DSL/NDSL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.

**Legend:****AIIC- Australian Inventory of Industrial Chemicals****NZIoC - New Zealand Inventory of Chemicals****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**International Regulations****The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable**The Stockholm Convention on Persistent Organic Pollutants** Not applicable**The Rotterdam Convention** Not applicable**Section 16: Other information**

Supplier Safety Data Sheet 04/ 2024

**Reason(s) For Issue:** 5 Yearly Revised Primary SDS**Prepared By** This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).**Revision date:** 02-May-2024**Revision Note:**

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend**

SVHC: Substances of Very High Concern for Authorization:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT: Specific Target Organ Toxicity

ATE: Acute Toxicity Estimate

LC50: 50% Lethal Concentration

LD50: 50% Lethal Dose

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 Environmental Protection Agency  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 Australian Industrial Chemicals Introduction Scheme (AICIS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 U.S. National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

**Disclaimer**

**This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.**

**If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.**

**Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.**

**End of Safety Data Sheet**