SAFETY DATA SHEET



Revision date: 02-May-2024

Revision Number 8

1. IDENTIFICATION OF TH	HE MATERIAL AND SUPPLIER		
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 chemica	al and restrictions on use		
Recommended use	Solvent.		
Uses advised against	No information available		
Details of the supplier of the safet	y data sheet		
Supplier Ixom Operations Pty Ltd (Incorporate NZBN: 9429041465226 Address: 16 Mt Maunganui South New Zealand Telephone Number: +64 9 368 2700 Facsimile: +64 9 368 2710 For further information, please co	6 Totara Street		
Contact Point	Product Safety Department		
Emergency telephone number			
Emergency Telephone	0 800 734 607 (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.			
2. HAZARDS IDENTIFICA	TION		
Not classified as a Dangerous Good	under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.		
Classified as hazardous according to	o criteria in the Hazardous Substances (Hazard Classification) Notice 2020.		
GHS Classification			
Signal word Warning			

Additives, Process Chemicals and Raw Materials (Combustible) Group Standard 2020 Approval Number: HSR002490

Flammable liquids	Category 4
Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

Label elements



Hazard statements

- H227 Combustible liquid H302 - Harmful if swallowed
- H312 Harmful in contact with skin
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H332 Harmful if inhaled

Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area Wash hands and face thoroughly after handling Wear eye/face protection Avoid release to the environment 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 If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse Wash contaminated clothing before reuse Call a POISON CENTER or doctor/physician if you feel unwell 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 **Precautionary Statements - Storage** Store in a well-ventilated place. Keep cool **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 Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

4. FIRST AID MEASURES

Description of first aid measures

General advice	This product presents no hazards under normal conditions of use		
Inhalation	Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.		
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.		
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. (Call a physician if symptoms occur).		
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.		
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with eyes. Avoid breathing vapors or mists.		
Most important symptoms and effects, both acute and delayed			
Symptoms	May cause redness and tearing of the eyes. Erythema (skin redness).		
Indication of any immediate medica	al attention and special treatment needed		
Note to physicians	Treat symptomatically.		
5. FIRE FIGHTING MEASURES			
Suitable Extinguishing Media			
Suitable Extinguishing Media	Dry chemical, CO2, water spray or regular foam.		
Unsuitable extinguishing media	No information available.		
Specific hazards arising from the chemical			
Specific hazards arising from the	Most vapors are heavier than air. Vapors may spread along ground and collect in low or		

Specific hazards arising from the chemical Most vapors are heavier than air. Vapors may spread along ground and collect in low of 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-fightersFirefighters should wear self-contained breathing apparatus and full firefighting turnout gear.
Use personal protection equipment.

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	Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.		
Precautions to prevent secondary hazards			

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

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. Use spark-proof tools and explosion-proof equipment.		
General hygiene considerations	Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Wear suitable gloves and eye/face protection. 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. Keep container closed when not in use.		
Incompatible materials	Strong oxidizing agents. Strong acids.		

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

2-Ethyl hexanol: 8hr WES-TWA = 200 ppm (Recommended standard)

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

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.

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.

Eye/face protection	Goggles.	
Hand protection	Impervious gloves.	
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Boots.	
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.	
Environmental exposure controls	No information available.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	
Appearance	No information available	
Color	Colourless	
Odor	Alcohol -like	
Odor threshold	Not determined	
Property_	Values	Remarks • Method
pH	7	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	Miscible in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	n-octanol/water, log Pow = $2.9 (25^{\circ}C; pH = 7)$	None known
Autoignition temperature	280°C	None known
Hyphen	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	9.845 mPa.s @20°C	None known

Other information

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		
Hazardous polymerization	Hazardous polymerization does not occur.	
Possibility of hazardous reactions	None under normal processing.	
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.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product Information

Inhalation	May cause irritation. Harmful by inhalation.	
Eye contact	Causes serious eye irritation.	
Skin contact	Causes skin irritation.	
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed.	
Symptoms	May cause redness and tearing of the eyes. Erythema (skin redness).	
Acute toxicity		
Numerical measures of toxicity		

See section 16 for terms and abbreviations

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

Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Germ cell mutagenicity	Not classified.	
Carcinogenicity	No information available.	
Reproductive toxicity	No information available.	
STOT - single exposure	No information available.	
STOT - repeated exposure	No information available.	
Aspiration hazard	No information available.	

12. ECOLOGICAL INFORMATION

Ec	oto	xicit	ty

Ecotoxicity	Harmful to aquatic life.
Terrestrial ecotoxicity	There is no data for this product

Persistence	and	degrada	bility

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation	No information available.	
Mobility		
Mobility in soil	No information available.	
Component Information		
Other adverse effects		
Other adverse effects	No information available.	
13. DISPOSAL CONSIDERATIONS		

Waste treatment methods

Waste from residues/unused products	Dispose of product in packaging in a way that is consistent with the EPA Consolidation 30 April 2021 of the Hazardous Substances (Disposal) Notice 2017 and the Act. Treat the substance using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance; or export the substance from New Zealand as waste.
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.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT	Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.
IATA_	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.
IMDG	Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

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

New Zealand	
National regulations	See section 8 for national exposure control parameters
<u>International Inventories</u> NZIoC TSCA DSL/NDSL	This material is listed on the New Zealand Inventory of Chemicals. Contact supplier for inventory compliance status. Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.

ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AIIC	This material is listed on the Australian Inventory of Industrial Chemicals.

Legend:

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

AIIC- Australian Inventory of Industrial Chemicals

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

16. OTHER INFORMATION

Supplier Safety Data Sheet 04/2024

Prepared By	This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).
Issuing Date:	23-Feb-2023
Reason(s) For Issue:	5 Yearly Revised Primary SDS

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

	Section 8: EXPOSURE CONTROLS/PERSONA	-	
TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
С	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)

Japan GHS Classification Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) 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 RTECS (Registry of Toxic Effects of Chemical Substances) 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