

SAFETY DATASHEET

Revision date: 09-Aug-2024 RevisionNumber8

Section 1: Identification

Product identifier

Product Name ETHYL DIGLYCOL ETHER

Product Code(s) 000030329301

Other means of identification

CAS No. 111-90-0

Synonyms Ethyldigol; Ethyl diicinol; Diethylene glycol monoethyl ether; Ethanol,2-(2-ethoxyethoxy)-; Ethyl Di-Glycol Ether; Ethylene diglycol monoethyl ether; 2-(2-Ethoxyethoxy) ethanol; Diethylene glycol ethyl ether.

Recommended use of the chemical and restrictions on use

Recommended use Solvent.

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier

Illumina Candle Supplies
4D Morrin Road, Mt Wellington
Auckland

Telephone Number: +64 21 763 471

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

Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUSGOODS.

Classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020. **GHS**

Classification

Serious eye damage/eye irritation	Category 2
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Label elements

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Signal word
Warning

Hazard statements H319 - Causes serious eye irritation

Precautionary Statements - Prevention

Wear eye/face protection.
Wash eyes thoroughly after handling..

Eyes

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.

Precautionary Statements - Storage

No storage statements.

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

Section 3: Composition/information on ingredients

Chemical name	CI	Weight-%
Ethyl diglycol	111-90-0	99
Water	7732-18-5	1

Section 4: First-aid measures

Description of first aid measures

General advice For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

Inhalation Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. Call a physician if symptoms occur.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash with plenty of water. Call a physician if symptoms occur.

Ingestion Clean mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately if symptoms occur.

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Most important symptoms and effects, both acute and delayed

Symptoms May cause redness and tearing of the eyes. Irritation. **Effects of Exposure** No information available.

Indication of any immediate medical attention and special treatment needed Note to physicians

Treat symptomatically. Symptoms may be delayed.

Section 5: Fire-fighting measures

Suitable Extinguishing Media

Suitable Extinguishing Media Dry chemical, CO₂, water spray or alcohol-resistant foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire. **Specific hazards**

arising from the chemical

Specific hazards arising from the chemical

confined areas (sewers, basements, tanks). Pay attention to

Most vapors are heavier than air. Vapors may spread along ground and collect in low

flashback. Combustible liquid. Sealed containers may rupture when heated.

Hazardous combustion products Carbon oxides.

Special protective actions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Special protective equipment and precautions for fire-fighters

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not touch or walk through spilled material. Evacuate personnel to safe areas. Use personal protective equipment as required. Wash thoroughly after handling.

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

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

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. **Page 3 / 10**

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Section 7: Handling and storage

Precautions for safe handling

Advice on safe handling Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. 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. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use.

Incompatible materials Halogens. Metal oxides. Strong acids. Strong oxidizing agents. Active metals (Alkali metals, Na, Ca). Non-metal oxides. Acyl halides. Metal phosphides. Strong alkalis.

Section 8: Exposure controls/personal protection

Control parameters

Exposure Limits No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority.

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas. **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.



Eye/face protection Goggles.

Hand protection Impervious gloves.

Skin and body protection Boots. Wear suitable protective clothing. Overalls.

Respiratory protection 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.

Environmental exposure controls No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

Appearance Transparent

Color Colourless

Odor No information available

Odor threshold No information available

Property Values Remarks • Method **pH** No data available None known **Melting point / freezing point** -76°C None known
Boiling point / boiling range 196-202°C None known **Flash point** 96°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 No data available

Upper flammability or explosive limits

No data available

Lower flammability or explosive limits

Vapor pressure 19 Pa @25°C None known **Vapor density** 4.6 None known **Relative density** 0.99 @20°C None known **Water solubility** No data available None known **Solubility(ies)** Miscible in water None known **Partition coefficient** n-Octanol/Water = -0.15 None known **Autoignition temperature** 204°C None known **Decomposition temperature** None known **Kinematic viscosity** No data available None known **Dynamic viscosity** No data available

None known

Other information

Particle characteristics

Section 10: Stability and reactivity

Reactivity

Reactivity Hygroscopic: absorbs moisture or water from surrounding air. **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 May react with metals to produce flammable hydrogen gas. **Conditions to avoid**

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Conditions to avoid Heat, flames and sparks. Moisture.

Incompatible materials

Incompatible materials Halogens. Metal oxides. Strong acids. Strong oxidizing agents. Active metals (Alkali metals, Na, Ca). Non-metal oxides. Acyl halides. Metal phosphides. Strong alkalis.

Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

Section 11: Toxicological information

Acute toxicity

Information on likely routes of exposure

Product Information 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:

Inhalation May cause irritation.

Eye contact Causes serious eye irritation.

Skin contact May cause irritation.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. **Symptoms** May cause redness and tearing of the eyes. Irritation.

Acute toxicity .

Numerical measures of toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl diglycol	= 10502 mg/kg	(Rat) = 9143 mg/kg (Rabbit) >	5240 mg/m ³ (Rat)
Water	> 90 mL/kg	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Not listed as carcinogenic according to IARC.
(IARC - International Agency for Research on Cancer).

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Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Refer to Section 16 for Key literature references and sources for data used to compile the

Data used to identify the health effects SDS.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Ethyl diglycol	-	LC50: =10000mg/L Lepomis macrochirus)LC 19100 - 23900mg/L(96h, Le macrochirus)LC50: 11400 - 15700mg/L(96h, Oncorhynchus LC50: 11600 - 16700mg/L Pimephales promelas)	EC50: 3940 - 4670mg/L(48h, (96h, Daphnia magna mykiss)

Terrestrial ecotoxicity There is no data for this product.

Persistence and degradability Readily biodegradable.

Bioaccumulative potential

Bioaccumulation There is no data for this product.

Mobility in soil

Mobility No information available.

Other adverse effects

No information available.

Section 13: Disposal considerations

Waste treatment methods

Waste from residues/unused

Dispose of product in packaging/container in a way that is consistent with the Hazardous

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products Substances (Disposal) Notice 2017 and the Act, and Hazardous Substances (Amendments and Revocations) Notice 2020.
Treat the chemical using a method that changes the characteristics or composition of the chemical so that the chemical is no longer a hazardous chemical; or export the chemical from New Zealand as waste.

Contaminated packaging For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from.

Packages may only be reused or recycled if:
- the substance has a physical hazard other than corrosive to metal, and has been treated to remove any residual contents of the hazardous substance;
- or for substances that have a health or environmental hazard, or corrosive to metal, the contents of the residue in the package are below the threshold for the substance to be classified as hazardous in the Hazardous Substances (Hazard Classification) Notice 2020.

Section 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.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

Section 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture HSR002503 - Additives, Process

Chemicals and Raw Materials (Subsidiary Hazard)

EPA New Zealand HSNO approval code or group standard

National regulations There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

Certified handlers, tracking and controlled substance license requirements Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain

vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information
fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information
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Controlled substance licenses are required to possess certain explosives,
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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

International Inventories

NZIoC All the constituents of this material are listed on the New Zealand Inventory of Chemicals. **TSCA** Contact supplier for inventory compliance status. **DSL/NDL** 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** All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.
TCSI Contact supplier for inventory compliance status.

Legend:

NZIoC - New Zealand Inventory of Chemicals

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - 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

TCSI - Taiwan Chemical Substance Inventory

Section 16: Other information

Prepared By This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services).

Revision date: 09-Aug-2024

Reason(s) For Issue: 5 Yearly Revised Primary SDS

Updated Formulation

Change in Hazardous Chemical Classification

Change in Exposure Controls

Change in Personal Protective Equipment (PPE)

Revision Note:

***Indicates updated data since last publication.

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

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TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit) Ceiling Maximum limit value * Skin designation ** Hazard Designation + Sensitizers 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)

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