

# SAFETY DATA SHEET



Revision date: 01-Jun-2020

Revision Number 6

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### Product identifier

**Product Name** TRIETHYLENE GLYCOL

**Product Code(s)** 000030235401

### Other means of identification

**CAS No.** 112-27-6

**Synonyms** TEG

### 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

Ixom Operations Pty Ltd (Incorporated in Australia)  
NZBN: 9429041465226 Address: 166 Totara Street  
Mt Maunganui South  
New Zealand

Telephone Number: +64 9 368 2700

Facimile: +64 9 368 2710

### For further information, please contact

**Contact Point** Product Safety Department

### Emergency telephone number

**Emergency Telephone** 0 800 734 607 (ALL HOURS)

## 2. HAZARDS IDENTIFICATION

Not classified as a Dangerous Good under NZS 5433:2012 Transport of Dangerous Goods on Land.

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

### GHS Classification

#### **SIGNAL WORD**

Warning

Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2017

Approval Number: HSR002503

Specific target organ toxicity (single exposure)

Category 3 - (HSNO 6.1E resp)

**Label elements****Hazard statements**

H335 - May cause respiratory irritation

**Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

**Precautionary Statements - Storage**

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

Store locked up

**Precautionary Statements - Disposal**

In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Notice 2017. This may also include any method of disposal that must be avoided.

**Other hazards which do not result in classification****3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

Chemical name	CAS No.	Weight-%
Triethylene glycol	112-27-6	100%

**4. FIRST AID MEASURES****Description of first aid measures****Emergency telephone number**

Poisons Information Center, New Zealand: 0800 764 766

Poisons Information Center, Australia: 13 11 26

**Inhalation**

Remove to fresh air. Administer oxygen if breathing is difficult. 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 with soap and water. Get medical attention if symptoms occur.

**Ingestion**

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

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

**Symptoms** No information available.

**Indication of any immediate medical 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 chemical** Combustible material.

**Hazardous combustion products** Carbon oxides.

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

**Special protective equipment for fire-fighters** Firefighters 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** Ensure adequate ventilation.

**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** Take up with sand or other non-combustible absorbent material and place into containers 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.

**Conditions for safe storage, including any incompatibilities**

<b>Storage Conditions</b>	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.
<b>Incompatible materials</b>	Strong acids. Strong oxidizing agents. Zinc.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

<b>Exposure Limits</b>	No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority.
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**Appropriate engineering controls**

<b>Engineering controls</b>	Ventilation systems.
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**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, SAFETY GLASSES, GLOVES, RESPIRATOR.



<b>Eye/face protection</b>	Glasses.
<b>Hand protection</b>	Wear suitable gloves. Impervious gloves.
<b>Skin and body protection</b>	Boots. Overalls.
<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.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical state</b>	Clear Liquid
<b>Appearance</b>	No information available.
<b>Color</b>	Colourless
<b>Odor</b>	Slight

**Odor threshold** No information available.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	7	None known
<b>Melting point / freezing point</b>	-7°C	None known
<b>Boiling point / boiling range</b>	286°C	None known
<b>Flash point</b>	166°C	CC (closed cup)
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	12.3%	
<b>Lower flammability or explosive limits</b>	2%	
<b>Vapor pressure</b>	<1 hPa @20°C	None known
<b>Vapor density</b>	5.18 (Air=1)	None known
<b>Relative density</b>	1.124 @20°C	None known
<b>Water solubility</b>	Miscible in water	None known
<b>Solubility(ies)</b>	No data available	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	355°C	None known
<b>Decomposition temperature</b>	No data available	None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	49.0 mPa.s @20°C	None known

Other information

## 10. STABILITY AND REACTIVITY

Reactivity

**Reactivity** Hygroscopic.

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.

Conditions to avoid

**Conditions to avoid** Heat, flames and sparks. Protect from moisture.

Incompatible materials

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

Hazardous decomposition products

**Hazardous decomposition products** Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity****Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	Irritating to respiratory system.
<b>Eye contact</b>	May cause irritation.
<b>Skin contact</b>	May cause irritation.
<b>Ingestion</b>	May cause gastrointestinal discomfort if consumed in large amounts.

**Symptoms** No information available.

**Acute toxicity****Numerical measures of toxicity**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Triethylene glycol	= 17 g/kg ( Rat )	> 20 mL/kg ( Rabbit )	> 3.9 mg/L ( Rat ) 4 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>	Not classified.
<b>Serious eye damage/eye irritation</b>	Not classified.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	May cause respiratory irritation.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

**Ecotoxicity** Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Triethylene glycol	-	LC50: 56200 - 63700mg/L (96h, Pimephales promelas) LC50:	EC50: =42426mg/L (48h, Daphnia magna)

		=10000mg/L (96h, Lepomis macrochirus) LC50: =61000mg/L (96h, Lepomis macrochirus)	
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**Persistence and degradability**

**Persistence and degradability** No information available.

**Bioaccumulative potential**

**Bioaccumulation** No information available.

**Mobility**

**Mobility in soil** No information available.

Chemical name	Partition coefficient
Triethylene glycol	-1.98

**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 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**

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 package has been treated to remove any residual contents of the hazardous substance (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the substance to be classified as hazardous (class 6, 8, or 9 substance).

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers

**14. TRANSPORT INFORMATION****ROAD AND RAIL TRANSPORT**

Not classified as a Dangerous Good under NZS 5433:2012 Transport of Dangerous Goods on Land.

**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

#### International Inventories

**NZIoC** This material is listed on the New Zealand Inventory of Chemicals.  
**TSCA** Contact supplier for inventory compliance status.  
**DSL/NDSL** 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.  
**AICS** This material is listed on the Australian Inventory of Chemical Substances.

#### **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  
**AICS** - Australian Inventory of 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

## 16. OTHER INFORMATION

Supplier Safety Data Sheet 01/ 2019

#### **Prepared By**

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

#### **Issuing Date:**

01-Jun-2020

#### **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**

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
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)  
EPA (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)  
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**