



**SAFETY DATA SHEET**  
**ETHYLENE GLYCOL MONOBUTYL ETHER**  
**REVISION 3, DATE 29 NOV 19**

## 1. IDENTIFICATION

<b>Product Name</b>	<b>Ethylene glycol monobutyl ether</b>
<b>Other Names</b>	2-Butoxyethanol; Butyl glycol; Ethylene glycol, mono-n-butyl ester
<b>Uses</b>	Industrial solvent for cleaner and coating formulations.
<b>Chemical Family</b>	No Data Available
<b>Chemical Formula</b>	C <sub>6</sub> H <sub>14</sub> O <sub>2</sub>
<b>Chemical Name</b>	Ethanol, 2-butoxy-
<b>Product Description</b>	No Data Available

### Contact Details of the Supplier of this Safety Data Sheet

<b>Organisation</b>	<b>Location</b>	<b>Telephone</b>
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

### Emergency Contact Details

*For emergencies only; DO NOT contact these companies for general product advice.*

<b>Organisation</b>	<b>Location</b>	<b>Telephone</b>
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

## 2. HAZARD IDENTIFICATION

### Poisons Schedule (Aust)

Schedule 6



## Globally Harmonised System

**Hazard Classification** Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

**Hazard Categories**

Flammable Liquids - Category 4

Acute Toxicity (Oral) - Category 4

Acute Toxicity (Dermal) - Category 4

Acute Toxicity (Inhalation) - Category 4

Skin Corrosion/Irritation - Category 2

Serious Eye Damage/Irritation - Category 2A

**Pictograms**

**Signal Word** Warning

<b>Hazard Statements</b>		<b>H227</b>	Combustible liquid.
		<b>H302 + H312 + H332</b>	Harmful if swallowed, in contact with skin or if inhaled.
		<b>H315</b>	Causes skin irritation.
		<b>H319</b>	Causes serious eye irritation.
<b>Precautionary Statements</b>	Prevention	<b>P210</b>	Keep away from flames and hot surfaces. No smoking.
		<b>P280</b>	Wear protective gloves/eye protection/face protection.
		<b>P270</b>	Do not eat, drink or smoke when using this product.
		<b>P233</b>	Keep container tightly closed.
	Response	<b>P370 + P378</b>	In case of fire: Use carbon dioxide (CO2), dry chemical, regular foam extinguishing agent or water spray for extinction.
		<b>P312</b>	Call a POISON CENTER or doctor if you feel unwell.
		<b>P302 + P352</b>	IF ON SKIN: Wash with plenty of water/...
		<b>P337 + P313</b>	If eye irritation persists: Get medical advice/attention.
		<b>P330</b>	Rinse mouth.
		<b>P332 + P313</b>	If skin irritation occurs: Get medical advice/attention.
		<b>P362</b>	Take off contaminated clothing.
		<b>P305 + P351 + P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Storage	<b>P403 + P235</b>	Store in a well-ventilated place. Keep cool.
	Disposal	<b>P501</b>	Dispose of contents/container in accordance with local / regional / national / international regulations.

**National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Dangerous Goods Classification** NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications	Physical Hazards	3.1D	Flammable liquid - low hazard
	Health Hazards	6.1D	Substances that are acutely toxic - Harmful
		6.4A	Substances that are irritating to the eye

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients

Chemical Entity	Formula	CAS Number	Proportion
2-Butoxyethanol	C6H14O2	111-76-2	>99 - 100 %

### 4. FIRST AID MEASURES

#### Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then give 1 cup (240 ml) of water. Do not induce vomiting. Immediately call a Poison Centre or doctor/physician for advice. Never give anything by mouth to an unconscious person.
Eye	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention, preferably from an ophthalmologist. *Protect unharmed eye.
Skin	IF ON SKIN: Remove contaminated clothing and shoes immediately. Flush skin with running water for at least 15 minutes. Call a Poison Centre or doctor/physician for advice. Wash contaminated clothing and shoes before reuse. *If burn is present, treat as any thermal burn, after decontamination.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor/physician for advice. Apply resuscitation if victim is not breathing - Administer oxygen if breathing is difficult.
Advice to Doctor	Treat symptomatically. Ensure that attending medical personnel are aware of the identity and nature of the product(s) involved, and take precautions to protect themselves. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. In cases where several ounces (60 - 100 ml) have been ingested, consider the use of ethanol and hemodialysis in the treatment. If ethanol is used, a therapeutically effective blood concentration in the range of 100 - 150 mg/dl may be achieved by a rapid loading dose followed by a continuous intravenous infusion. 4-Methyl pyrazole (Antizol®) is an effective blocker of alcohol dehydrogenase and should be used in the treatment of ethylene glycol butyl ether (EGBE) or methanol intoxication, if available. The signs and symptoms of poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury, and possible late stage cranial nerve involvement. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. Maintain adequate ventilation and oxygenation of the patient. In severe poisoning, respiratory support with mechanical ventilation and positive end expiratory pressure may be required. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach.

**Medical Conditions Aggravated by Exposure** No information available.

### 5. FIRE FIGHTING MEASURES

General Measures	Keep people away. Isolate fire and deny unnecessary entry. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. If safe to do so, move undamaged containers from fire area. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.
Flammability Conditions	Combustible liquid; May burn but does not ignite readily.

<b>Extinguishing Media</b>	Use dry chemical, Carbon dioxide (CO <sub>2</sub> ), foam or water spray for extinction. Burning liquids may be extinguished by dilution with water - Do not use direct water stream. May spread fire. *Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.
<b>Fire and Explosion Hazard</b>	Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.
<b>Hazardous Products of Combustion</b>	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include Carbon oxides.
<b>Special Fire Fighting Instructions</b>	Contain runoff from fire control or dilution water - Runoff may pollute waterways.
<b>Personal Protective Equipment</b>	Wear positive pressure self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection.
<b>Flash Point</b>	61 - 67 °C [Closed cup]
<b>Lower Explosion Limit</b>	1.1 %
<b>Upper Explosion Limit</b>	10.6 %
<b>Auto Ignition Temperature</b>	230 - 245 °C
<b>Hazchem Code</b>	No Data Available

## 6. ACCIDENTAL RELEASE MEASURES

<b>General Response Procedure</b>	Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames). Do not touch or walk through spilled material. Avoid breathing vapours and contact with eyes, skin and clothing.
<b>Clean Up Procedures</b>	Absorb with earth, sand or other non-combustible material and transfer to a suitable container for disposal (see SECTION 13). Use non-sparking tools. For large amounts: Pump off product. *Use clean non-sparking tools to collect absorbed material.
<b>Containment</b>	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas.
<b>Decontamination</b>	Wash away remainder with plenty of water.
<b>Environmental Precautionary Measures</b>	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. Local authorities should be advised if significant spillages cannot be contained.
<b>Evacuation Criteria</b>	Spill or leak area should be isolated immediately. Keep unnecessary and unprotected personnel from entering the area. Large spills: Dike area to contain spill.
<b>Personal Precautionary Measures</b>	Use personal protective equipment as required (see SECTION 8).

## 7. HANDLING AND STORAGE

<b>Handling</b>	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation - Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing mist/vapours/spray and contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). Combustible liquid: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Ground and bond container and receiving equipment. Electrical installations/working materials must comply with the technological safety standards.
<b>Storage</b>	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Keep away from foodstuffs and incompatible materials (see SECTION 10). Store locked up.
<b>Container</b>	Keep in the original container or store in the following material(s): Carbon steel, Stainless steel, Phenolic lined steel drums. Do not store in Aluminum, Copper, Galvanized iron, Galvanized steel. *Containers, even those that have been emptied, can contain vapours. Do not cut, drill, grind, weld or perform similar operations on or near empty containers.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>General</b>	<p>For SUBSTANCE: 2-Butoxyethanol (CAS No. 111-76-2):</p> <ul style="list-style-type: none"> <li>- Safe Work Australia Exposure Standard: TWA = 20 ppm (96.9 mg/m<sup>3</sup>); STEL = 50 ppm (242 mg/m<sup>3</sup>); Absorption through the skin may be a significant source of exposure (Sk).</li> <li>- New Zealand Workplace Exposure Standard [Next review 2023]: TWA = 25 ppm (121 mg/m<sup>3</sup>); Skin absorption (skin).</li> <li>- NIOSH REL: TWA = 5 ppm (24 mg/m<sup>3</sup>).</li> <li>- OSHA PEL: TWA = 50 ppm (240 mg/m<sup>3</sup>).</li> <li>- Immediately Dangerous to Life or Health (IDLH) Concentration: 700 ppm.</li> </ul>
<b>Exposure Limits</b>	No Data Available
<b>Biological Limits</b>	No information available.
<b>Engineering Measures</b>	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
<b>Personal Protection Equipment</b>	<ul style="list-style-type: none"> <li>- Respiratory protection: Wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. Recommended: use an approved air-purifying respirator, Organic vapour cartridge (refer to AS/NZS 1715 &amp; 1716).</li> <li>- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Use chemical goggles. If exposure causes eye discomfort, use a full-face respirator.</li> <li>- Hand protection: Wear protective gloves. Recommended: Use chemical resistant gloves, e.g. Butyl rubber, Ethyl vinyl alcohol laminate (EVAL).</li> <li>- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.</li> </ul> <p>*Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use.</p>
<b>Special Hazards Precautions</b>	Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.
<b>Work Hygienic Practices</b>	Do not eat, drink or smoke when using this product. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	Liquid
<b>Appearance</b>	Liquid
<b>Odour</b>	Mild, sweet, ester-like
<b>Colour</b>	Colourless
<b>pH</b>	No Data Available
<b>Vapour Pressure</b>	1.17 hPa (@ 25 °C)
<b>Relative Vapour Density</b>	4 Air = 1
<b>Boiling Point</b>	171 °C
<b>Melting Point</b>	-75 °C
<b>Freezing Point</b>	-75 °C
<b>Solubility</b>	Completely soluble in water 25°C
<b>Specific Gravity</b>	0.90
<b>Flash Point</b>	61 - 67 °C [Closed cup]
<b>Auto Ignition Temp</b>	230 - 245 °C
<b>Evaporation Rate</b>	0.06 - 0.1 (n-Butyl acetate = 1)
<b>Bulk Density</b>	No Data Available
<b>Corrosion Rate</b>	No Data Available

<b>Decomposition Temperature</b>	124.7 °C
<b>Density</b>	No Data Available
<b>Specific Heat</b>	No Data Available
<b>Molecular Weight</b>	118.2 g/mol
<b>Net Propellant Weight</b>	No Data Available
<b>Octanol Water Coefficient</b>	Log Pow: 0.81 (20 °C)
<b>Particle Size</b>	No Data Available
<b>Partition Coefficient</b>	No Data Available
<b>Saturated Vapour Concentration</b>	No Data Available
<b>Vapour Temperature</b>	No Data Available
<b>Viscosity</b>	3.3 mPa.s - 3.642 mm <sup>2</sup> /s (@ 20 °C)
<b>Volatile Percent</b>	No Data Available
<b>VOC Volume</b>	No Data Available
<b>Additional Characteristics</b>	No information available.
<b>Potential for Dust Explosion</b>	Not applicable.
<b>Fast or Intensely Burning Characteristics</b>	No information available.
<b>Flame Propagation or Burning Rate of Solid Materials</b>	No information available.
<b>Non-Flammables That Could Contribute Unusual Hazards to a Fire</b>	Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.
<b>Properties That May Initiate or Contribute to Fire Intensity</b>	Combustible liquid; May burn but does not ignite readily.
<b>Reactions That Release Gases or Vapours</b>	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include Carbon oxides.
<b>Release of Invisible Flammable Vapours and Gases</b>	No information available.

## 10. STABILITY AND REACTIVITY

<b>General Information</b>	Product can oxidize at elevated temperatures. May form peroxides in the presence of air. Generation of gas during decomposition can cause pressure in closed systems.
<b>Chemical Stability</b>	Thermally stable at typical use temperatures.
<b>Conditions to Avoid</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not distill to dryness.
<b>Materials to Avoid</b>	Incompatible/reactive with strong acids, strong oxidizers, Bases, Amines, Ammonia, Acid chlorides.
<b>Hazardous Decomposition Products</b>	Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include Aldehydes, Ketones, Organic acids.
<b>Hazardous Polymerisation</b>	Polymerization will not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>General Information</b>	<p>- Acute toxicity: Harmful if swallowed, in contact with skin and if inhaled. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Massive ingestion of ethylene glycol monobutyl ether (attempted suicides) may produce metabolic acidosis and subsequent secondary effects such as hemolysis, central nervous system and kidney effects.</p> <p>- Skin corrosion/irritation: Causes skin irritation. Brief contact may cause slight skin irritation with local redness. Repeated exposure may cause irritation, even a burn. May cause more severe response on covered skin (under clothing, gloves).</p>
----------------------------	--

- Eye damage/irritation: Causes serious eye irritation. May cause moderate corneal injury. Effects may be slow to heal. Vapour may cause eye irritation experienced as mild discomfort and redness.
- Respiratory/skin sensitisation: Did not cause allergic skin reactions when tested in humans. Did not cause allergic skin reactions when tested in guinea pigs.
- Germ cell mutagenicity: In vitro genetic toxicity studies were predominantly negative. Animal genetic toxicity studies were negative.
- Carcinogenicity: In long-term animal studies with ethylene glycol butyl ether, small but statistically significant increases in tumors were observed in mice but not rats. The effects are not believed to be relevant to humans. If the material is handled in accordance with proper industrial handling procedures, exposures should not pose a carcinogenic risk to man.
- Reproductive toxicity: In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.
- STOT (single exposure): May cause respiratory irritation. Excessive exposure may cause irritation to upper respiratory tract (nose and throat). In humans, symptoms may include Headache. In animals, effects have been reported on the blood (hemolysis) and secondary effects on the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits.
- STOT (repeated exposure): Results from acute and repeat exposure studies in rats, mice and rabbits indicate that EGBE causes injury to red blood cells with subsequent intravascular hemolysis and anemia, and secondary changes in the liver and kidney. Human and guinea pig red blood cells are resistant to EGBE injury and therefore the effects noted in sensitive species are not relevant to humans.
- Aspiration toxicity: Based on physical properties, not likely to be an aspiration hazard.

**Acute**

<b>Ingestion</b>	Acute toxicity (Oral): - LD50, Rat: 1,300 mg/kg
<b>Other</b>	Acute toxicity (Dermal): - LD50, Rat: >2,000 mg/kg
<b>Inhalation</b>	Acute toxicity (Inhalation): - LC0, Guinea pig: >3.1 mg/l (1 h); No deaths occurred at this concentration.
<b>Carcinogen Category</b>	None

**12. ECOLOGICAL INFORMATION**

<b>Ecotoxicity</b>	Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).
<b>Persistence/Degradability</b>	Material is readily biodegradable (90.4 %, 28 days) [OECD Test Guideline 301B or Equivalent].
<b>Mobility</b>	Potential for mobility in soil is high (Koc between 50 and 150). - Koc: 67 [Estimated].
<b>Environmental Fate</b>	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.
<b>Bioaccumulation Potential</b>	Bioconcentration potential is low (BCF < 100 or Log Pow < 3). - log Pow: 0.81 [Measured]. - BCF: 3.2
<b>Environmental Impact</b>	No Data Available

**13. DISPOSAL CONSIDERATIONS**

<b>General Information</b>	Where reuse or recycling are not appropriate, dispose of the product in an environmentally sound manner in accordance with relevant Commonwealth, state, territory and local government legislation.
<b>Special Precautions for Land Fill</b>	For unused and uncontaminated product, the preferred options include sending to a licensed, permitted incinerator or other thermal destructive device.

**14. TRANSPORT INFORMATION****Land Transport (Australia)**

ADG Code

<b>Proper Shipping Name</b>	Ethylene glycol monobutyl ether
<b>Class</b>	C1 Combustible Liquids - Flash Point >60°C - <=93°C, Closed Cup
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available
<b>Comments</b>	NON-DANGEROUS GOODS: Not regulated for LAND transport.

**Land Transport (Malaysia)**

ADR Code

<b>Proper Shipping Name</b>	Ethylene glycol monobutyl ether
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available
<b>Comments</b>	NON-DANGEROUS GOODS: Not regulated for LAND transport.

**Land Transport (New Zealand)**

NZS5433

<b>Proper Shipping Name</b>	Ethylene glycol monobutyl ether
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available
<b>Comments</b>	NON-DANGEROUS GOODS: Not regulated for LAND transport.

**Land Transport (Thailand)**

<b>Proper Shipping Name</b>	Ethylene glycol monobutyl ether
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available



# SAFETY DATA SHEET ETHYLENE GLYCOL MONOBUTYL ETHER REVISION 3, DATE 29 NOV 19

Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

## Land Transport (United States of America)

US DOT

Proper Shipping Name	Combustible liquid, n.o.s. (Ethylene glycol monobutyl ether)
Class	C1 Combustible Liquids - Flash Point >60°C - <=93°C, Closed Cup
Subsidiary Risk(s)	No Data Available
ERG	128 Flammable Liquids (Non-Polar / Water-Immiscible)
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	III
Special Provision	NA1993
Comments	Above applies only to containers over 119 gallons or 450 litres. Not regulated if shipped in packages less than or equal to 119 gallons (450 litres).

## Sea Transport

IMDG Code

Proper Shipping Name	Ethylene glycol monobutyl ether
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No
Comments	NON-DANGEROUS GOODS: Not regulated for SEA transport.

## Air Transport

IATA DGR

Proper Shipping Name	Ethylene glycol monobutyl ether
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport.

## National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
--------------------------------	---

**15. REGULATORY INFORMATION**

General Information No Data Available

Poisons Schedule (Aust) Schedule 6

**Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR001154

**National/Regional Inventories**

Australia (AIC)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	Not Determined
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Not Determined
Korea (KECI)	Listed
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Not Determined
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Listed

**16. OTHER INFORMATION**

Related Product Codes	ETGLBE1400, ETGLBE1502, ETGLBE1600, ETGLBE1601, ETGLBE1602, ETGLBE1603, ETGLBE1800, ETGLBE1900, ETGLBE2100, ETGLBE2505, ETGLBE2806, ETGLBE2808, ETGLBE2809, ETGLBE3050, ETGLBE3100, ETGLBE3200, ETGLBE3302, ETGLBE3303, ETGLBE3600, ETGLBE4202, ETGLBE4203, ETGLBE4204, ETGLBE4205, ETGLBE5800, ETGLBE6100, ETGLBE6200, ETGLBE6201, ETGLBE6400, ETGLBE6700, ETGLBE6911, ETGLBE6921, ETGLBE6937, ETGLBE6941, ETGLBE6950, ETGLBE7201, ETGLBE7202, ETGLBE8019, ETGLBE8020, ETGLBE8600, ETGLBE8810, ETGLBE9001, ETGLBE9099, ETGLBE9910, ETGLBE9920
Revision	3
Revision Date	29 Nov 2019
	< Less Than

## Key/Legend

> Greater Than  
**AICS** Australian Inventory of Chemical Substances  
**atm** Atmosphere  
**CAS** Chemical Abstracts Service (Registry Number)  
**cm<sup>2</sup>** Square Centimetres  
**CO<sub>2</sub>** Carbon Dioxide  
**COD** Chemical Oxygen Demand  
**deg C (°C)** Degrees Celcius  
**EPA (New Zealand)** Environmental Protection Authority of New Zealand  
**deg F (°F)** Degrees Farenheit  
**g** Grams  
**g/cm<sup>3</sup>** Grams per Cubic Centimetre  
**g/l** Grams per Litre  
**HSNO** Hazardous Substance and New Organism  
**IDLH** Immediately Dangerous to Life and Health  
**immiscible** Liquids are insoluable in each other.  
**inHg** Inch of Mercury  
**inH<sub>2</sub>O** Inch of Water  
**K** Kelvin  
**kg** Kilogram  
**kg/m<sup>3</sup>** Kilograms per Cubic Metre  
**lb** Pound  
**LC<sub>50</sub>** LC stands for lethal concentration. LC<sub>50</sub> is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.  
**LD<sub>50</sub>** LD stands for Lethal Dose. LD<sub>50</sub> is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.  
**ltr or L** Litre  
**m<sup>3</sup>** Cubic Metre  
**mbar** Millibar  
**mg** Milligram  
**mg/24H** Milligrams per 24 Hours  
**mg/kg** Milligrams per Kilogram  
**mg/m<sup>3</sup>** Milligrams per Cubic Metre  
**Misc or Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.  
**mm** Millimetre  
**mmH<sub>2</sub>O** Millimetres of Water  
**mPa.s** Millipascals per Second  
**N/A** Not Applicable  
**NIOSH** National Institute for Occupational Safety and Health  
**NOHSC** National Occupational Heath and Safety Commission  
**OECD** Organisation for Economic Co-operation and Development  
**Oz** Ounce  
**PEL** Permissible Exposure Limit  
**Pa** Pascal  
**ppb** Parts per Billion  
**ppm** Parts per Million  
**ppm/2h** Parts per Million per 2 Hours  
**ppm/6h** Parts per Million per 6 Hours  
**psi** Pounds per Square Inch  
**R** Rankine  
**RCP** Reciprocal Calculation Procedure  
**STEL** Short Term Exposure Limit  
**TLV** Threshold Limit Value  
**tne** Tonne  
**TWA** Time Weighted Average  
**ug/24H** Micrograms per 24 Hours  
**UN** United Nations  
**wt** Weight