



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	BUTYL GLYCOL ETHER
Other Names	Butyl Ethoxol, Butyl Glycol, Butyl Oxitol, Butyl Icinol, Ethylene Glycol Monobutyl ether, Ethylene Glycol Butyl Ether, 2-Butoxy Ethanol, Ethanol 2-butoxy-, EGBE
Manufacturer's Product Code	16890
Recommended Use	Solvent

Details of Supplier/Manufacturer

Company:	Recochem Inc.	ABN: 69 010 485 999
Address:	1809 Lytton Road, Lytton, Queensland 4178	
Phone:	(07) 3308 5200	Fax: (07) 3308 5201
Website:	www.recochem.com.au	


Emergency Telephone Numbers

Business Hours:	(07) 3308 5200	
After Hours:	1300 131 001	
Poisons Information:	Australia: 13 11 26	New Zealand: 0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Hazardous chemical	<i>according to classification by Safe Work Australia</i>
Non-dangerous goods	<i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i>

Signal Word	WARNING
--------------------	----------------

GHS Classification	Pictogram	Hazard statement
Flammable Liquids, Category 4	N/A	H227 Combustible liquid
Acute Toxicity - Oral, Category 4	 EXCLAMATION MARK	H302 Harmful if swallowed
Acute Toxicity - Dermal, Category 4		H312 Harmful in contact with skin
Acute Toxicity - Inhalation, Category 4		H332 Harmful if inhaled
Eye Irritation, Category 2A		H319 Causes serious eye irritation
Skin Irritation, Category 2		H315 Causes skin irritation

Product: BUTYL GLYCOL ETHER**Precautionary statements:**

GENERAL	
P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
PREVENTATIVE	
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P261	Avoid breathing mist/vapours/spray
P264	Wash thoroughly after handling
P270	Do not eat drink or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/eye protection/face protection
RESPONSE	
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P330	Rinse mouth
P332 + P313	If skin irritation occurs: Get medical advice/attention
P337 + P313	If eye irritation persists: Get medical advice/attention
P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P370 + P378	In case of fire: Use foam/water spray/fog for extinction
STORAGE	
P403 + P235	Store in a well-ventilated place. Keep cool
DISPOSAL	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

Chemical Entity	CAS Number	Proportion (%)
2-Butoxyethanol	111-76-2	> 99

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

Inhalation:	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing.
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available. Can be absorbed through skin with resultant toxic effects. Seek immediate medical assistance.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. Seek immediate medical assistance.
Ingestion:	If swallowed, do NOT induce vomiting. Transport to nearest medical facility for additional treatment.

Product: BUTYL GLYCOL ETHER

Symptoms caused by exposure

Inhalation:	Breathing in vapour will produce respiratory irritation. Breathing in high concentrations can produce central nervous system depression which can lead to unconsciousness.
Skin:	Contact with skin will result in irritation. Will have a degreasing effect on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis. Can be absorbed through the skin. Effects can include those described for swallowing.
Eye:	May result in redness, swelling and/or blurred vision.
Ingestion:	Swallowing may result in nausea, vomiting and central nervous system depression (similar to drunkenness).

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Use water fog or spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical

Carbon monoxide and/or carbon dioxide may be evolved.

Special protective equipment and precautions for fire fighters

Combustible liquid. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Ventilate contaminated area thoroughly.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Avoid breathing of or contact with material. Use in well ventilated areas. Wash thoroughly after handling. Avoid contact with skin and eyes and clothing. Handle open containers in well ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Do not empty into drains. Do not eat, drink or smoke in contaminated areas. Before eating, drinking or smoking, remove contaminated clothing and wash hands..

Conditions for safe storage, including any incompatibilities

Do not store near strong oxidants, copper and natural rubber.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia -
2-Butoxyethanol: 96.9mg/m³ (20ppm) TWA (8hr) skin, 242mg/m³ (50ppm) STEL

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual protection measures

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.
Respiratory protection:	If inhalation risk exists an approved organic vapour respirator (AS/NZS 1715 and 1716) should be worn.
Thermal hazards:	Not applicable.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colourless clear liquid
Odour:	Unpleasant
Odour threshold (ppm):	Data not available
pH:	Data not available
Melting point/freezing point (°C):	-65
Initial boiling point and boiling range (°C):	166
Flash point (°C):	68 (closed cup)
Evaporation rate (Butyl acetate = 1):	Data not available
Flammability:	Combustible
Upper/lower flammability or explosive limits (%):	1.1 - 10.6
Vapour pressure (kPa @ 20°C):	0.1
Vapour density (air = 1, @ 15°C):	4.8
Density (g/ml @ 15°C):	0.9
Solubility (kg/m ³):	Miscible with water
Partition coefficient: n-octanol/water:	Data not available
Auto-ignition temperature (°C):	230
Decomposition temperature (°C):	Data not available
Kinematic viscosity (mm ² /s @ 20°C):	Data not available

Product: BUTYL GLYCOL ETHER

SECTION 10 STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible materials

Strong oxidising agents, copper and natural rubber.

Hazardous decomposition products

Burning can produce carbon monoxide and/or carbon dioxide.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:	Expected to be of low toxicity - Oral LD50 (rat): 530-3000mg/kg Oral LD50 (guinea pig): 950-1414 mg/kg
Skin corrosion/irritation:	Mild irritant – Dermal LD50 (rabbit): 100-610 mg/kg Dermal LD50 (guinea pig): 1200-2000mg/kg
Serious eye damage/irritation:	May irritate the eyes.
Respiratory or skin sensitisation:	Not expected to be a sensitiser
Germ cell mutagenicity:	Not a mutagen
Carcinogenicity:	Not a carcinogen
Reproductive toxicity:	Not expected to impair fertility
Specific Target Organ Toxicity (STOT) – single exposure:	Inhalation of vapours can result in headaches, dizziness, and possible nausea. Inhalation of higher concentrations can produce central nervous system depression and unconsciousness.
Specific Target Organ Toxicity (STOT) – repeated exposure:	Available evidence from animal studies indicates that repeated or prolonged exposure to this material could result in effects on the blood system, liver and kidneys.
Aspiration hazard:	Not considered an aspiration hazard

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Acute toxicity:

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Chronic toxicity:

Fish –	Data not available
--------	--------------------

Product: BUTYL GLYCOL ETHER

Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Biodegradable.

Bioaccumulative potential

Negligible potential to bioaccumulate.

Mobility in soil

Miscible with water.

Other adverse effects

Data not available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN number:	Not applicable
Proper shipping name:	Not applicable
Australian Dangerous Goods class:	Not applicable
Australian Dangerous Goods packing group:	Not applicable
Hazchem code:	Not applicable

SECTION 15 REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	6
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	Not applicable

SECTION 16 OTHER INFORMATION

Date of preparation:	14/09/2017
Revision number:	6
Changes in this revision:	Corrected H319 wording

This SDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.
