

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:

KRYNEX GLYCOULTRA G40 50/50

Recommended Use of the Chemical Raw material. and Restrictions on Use

Supplier: ABN: Street Address:	Ixom Operations Pty Ltd 51 600 546 512 Level 8, 1 Nicholson Street East Melbourne Victoria 3002 Australia
Telephone Number:	+61 3 9906 3000
Emergency Telephone:	1 800 033 111 (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 IDENTIFICATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:

Specific target organ toxicity (repeated exposure) - Category 2

SIGNAL WORD: WARNING



Hazard Statement(s): H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s):

Prevention:

P260 Do not breathe mist, vapours, spray.

Response:

P314 Get medical advice/attention if you feel unwell.

Storage:

No storage statements.

Disposal:

P501 Dispose of contents and container in accordance with local, regional, national, international regulations.

Poisons Schedule (SUSMP): S6 Poison.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Product Name: KRYNEX GLYCOULTRA G40 50/50 Substance No: 00000055638



Components	CAS Number	Proportion	Hazard Codes
Ethylene glycol	107-21-1	30-60%	H302 H373
Other component(s)	-	to 100%	-

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact:

If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice. A component, or components, of this material can be absorbed through the skin with resultant adverse effects.

Eye Contact:

If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Get to a doctor or hospital quickly.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically. Ethylene glycol can cause central nervous system depression and metabolic acidosis. Consider removal by gastric lavage. Blockade of the diacid/hydroxyacid metabolites may follow competitive inhibition of alcohol dehydrogenase with ethanol or 4-methyl pyrazole. Consider maintenance of a plasma ethanol level of 100 mg/dL to 150 mg/dL.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards arising from the chemical:

Non-combustible material.

Special protective equipment and precautions for fire-fighters:

Not combustible, however following evaporation of the water component of the material, the residual material can burn if ignited. On burning will emit toxic fumes, including those of oxides of carbon. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

6. ACCIDENTAL RELEASE MEASURES



Emergency procedures/Environmental precautions:

Slippery when spilt. Avoid accidents, clean up immediately. Clear area of all unprotected personnel. Wear protective equipment to prevent skin and eye contact. Avoid breathing in vapours. Work up wind or increase ventilation. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Wash area down with excess water.

7. HANDLING AND STORAGE

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

Precautions for safe handling:

Avoid skin and eye contact and breathing in vapour, mists and aerosols. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Ethylene glycol (particulate): 8hr TWA = 10 mg/m³, Sk Ethylene glycol (vapour): 8hr TWA = 52 mg/m³ (20 ppm), 15 min STEL = 104 mg/m³ (40 ppm), Sk

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

Sk' (skin) Notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

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:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as Personal Protective Equipment (PPE):

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.



Wear overalls, safety glasses and impervious gloves. Use with adequate ventilation. 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. 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

Physical state:	Translucent Liquid
Colour:	Magenta
Odour:	Product specific
Solubility:	Miscible with water.
Specific Gravity:	1.060-1.080 @20°C
Flash Point (°C):	Not applicable
Flammability Limits (%):	Not available
Autoignition Temperature (°C):	Not available
Boiling Point/Range (°C):	Not available
pH:	7.5-9.5
Freezing Point/Range (°C):	-45 to -37

10. STABILITY AND REACTIVITY

Reactivity:	No information available.		
Chemical stability:	Stable under normal conditions of use.		
Possibility of hazardous reactions:	Hazardous polymerisation will not occur.		
Conditions to avoid:	Avoid contact with foodstuffs.		
Incompatible materials:	None known.		
Product Name: KRYNEX GLYCOULTRA G40 50/50 Substance No: 000000055638		Issued:	09/08/2017 Version: 1



Hazardous decomposition Oxides of carbon. products:

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion:	Swallowing can result in nausea, vomiting, diarrhoea, and abdominal pain. Ingestion of large amounts may cause central nervous system (CNS) depression. Symptoms can include dizziness, headache, stupor, loss of coordination and/or loss of consciousness. Ingestion of large quantities may cause dizziness, weakness, collapse and respiratory failure. Respiratory system involvement may be delayed 12- 24 hours.
Eye contact:	May be an eye irritant.
Skin contact:	Contact with skin may result in irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis. Repeated or prolonged skin contact may lead to irritant contact dermatitis. Component/s of this material can be absorbed through the skin with resultant adverse effects.
Inhalation:	Breathing in vapour can result in headaches, dizziness, drowsiness, and possible nausea.

Acute toxicity: No LD50 data available for the product. However, for Ethylene Glycol : Oral LD50 (rat): 4700 mg/kg

Skin corrosion/irritation: Mild irritant (rabbit).

Serious eye damage/irritation: Mild irritant (rabbit).

Chronic effects: May cause damage to organs through prolonged or repeated exposure. Available evidence from animal studies indicate that repeated or prolonged exposure to a component of this material could result in effects on the kidneys.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.



Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport

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.

15. REGULATORY INFORMATION

Classification:

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:

Specific target organ toxicity (repeated exposure) - Category 2

Hazard Statement(s):

H373 May cause damage to organs through prolonged or repeated exposure.

Poisons Schedule (SUSMP): S6 Poison.

16. OTHER INFORMATION

'Registry of Toxic Effects of Chemical Substances'. Ed. D. Sweet, US Dept. of Health & Human Services: Cincinatti, 2017.

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

Reason(s) for Issue:

First Issue Primary SDS

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.