

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:

Other name(s):

TMPDE 80; TMPDE 85.

Recommended Use of the Chemical Chemical intermediate. and Restrictions on Use

| Supplier: NZBN: Street Address: | Ixom Operations Pty Ltd (Incorporated in Australia) 9429041465226 166 Totara Street Mt Maunganui South New Zealand |
|---------------------------------------|--|
| Telephone Number: | +64 9 368 2700 |
| Facsimile: | +64 9 368 2710 |
| Emergency Telephone: | 0 800 734 607 (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.

TRIMETHYLOLPROPANE DIALLYL ETHER

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.

SIGNAL WORD: WARNING

Subclasses:

Subclass 6.1 Category E - Substances which are acutely toxic. Subclass 6.3 Category B - Substances that are mildly irritating to the skin.

Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2017 Approval Number: HSR002503

Hazard Statement(s):

H303 May be harmful if swallowed. H316 Causes mild skin irritation.

Precautionary Statement(s):

Prevention:

P102 Keep out of reach of children. P273 Avoid release to the environment.

Response:

P332+P313 If skin irritation occurs: Get medical advice/attention.

Storage:

No storage statements.

Disposal:

P501 In 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.

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3. COMPOSITION AND INFORMATION ON INGREDIENTS

| Components | CAS Number | Proportion | Hazard Codes |
|----------------------------------|------------|------------|--------------|
| Trimethylolpropane diallyl ether | 682-09-7 | 80-85% | - |
| Impurities | - | 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. Seek medical advice if effects persist.

Skin Contact:

If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water and soap. If swelling, redness, blistering or irritation occurs seek medical assistance.

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, give a glass of water to drink. If vomiting occurs give further water. Seek medical advice.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Unsuitable Extinguishing Media:

Water jet.

Specific hazards arising from the chemical:

Combustible liquid.

Special protective equipment and precautions for fire-fighters:

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. Keep containers cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Clear area of all unprotected personnel. Shut off all possible sources of ignition. If contamination of sewers or waterways has occurred advise local emergency services.

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

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). For large amounts, pump off product. Collect and seal in properly labelled containers or drums for disposal. Wash area down with detergent and excess water.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid skin and eye contact and breathing in vapour, mists and aerosols.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Avoid contact with the atmosphere. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Appropriate engineering controls:

Natural ventilation should be adequate under normal use conditions. Keep containers closed when not in use.

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.



Wear overalls, safety glasses and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Liquid Physical state: Colour: Colourless Odour: Mild Slightly soluble in water. Soluble in acetone, methanol, n-butanol. Solubility: **Specific Gravity:** 0.96 @20°C Relative Vapour Density (air=1): Not available ca. 0.17 Pa Vapour Pressure (20 °C): Flash Point (°C): 127 Flammability Limits (%): Not available Autoignition Temperature (°C): 230 Solubility in water (g/L): 4.2 @20°C Boiling Point/Range (°C): 260

Product Name: TRIMETHYLOLPROPANE DIALLYL ETHER Substance No: 000000019165

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| Not available |
|---------------|
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| < -80 |
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10. STABILITY AND REACTIVITY

| Reactivity: | No information available. |
|--------------------------------------|---|
| Chemical stability: | May form peroxides in the presence of air. |
| Possibility of hazardous reactions: | Possible formation of peroxide. |
| Conditions to avoid: | Do not overheat. |
| Incompatible materials: | Incompatible with oxidising agents including air (oxygen) . |
| Hazardous decomposition products: | Oxides of carbon. Acrolein. Allylalcohol. |

@25°C

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: | No adverse effects expected, however, large amounts may cause nausea and vomiting. | |
|---|--|--|
| Eye contact: | May be an eye irritant. | |
| Skin contact: | Contact with skin will result in mild irritation. | |
| Inhalation: | Breathing in vapour may produce respiratory irritation. | |
| Acute toxicity: Oral LD50 (rat): 4272-6500 mg/kg Dermal LD50 (rabbit): >3000 mg/kg | | |
| Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: | Mild irritant (rabbit). Non-irritant (rabbit). Not a skin sensitiser (guinea pig). No known effect. | |
| Chronic effects: . | | |
| Mutagenicity: Carcinogenicity: Reproductive toxicity: Specific Target Organ Toxicity (STOT) - single exposure: Specific Target Organ Toxicity (STOT) - repeated exposure: | Not classified. Not listed as carcinogenic according to the International Agency for Research on Cancer (IARC). Not classified. No information available. No information available. | |
| Aspiration hazard: | No information available. | |



12. ECOLOGICAL INFORMATION

| Ecotoxicity | Avoid contaminating waterways. |
|----------------------------|--|
| Persistence/degradability: | Not readily biodegradable. Inherently biodegradable. |
| Bioaccumulative potential: | No information available. |

Mobility in soil: No information available.

48hr EC50 (Daphnia magna): 189 mg/L

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to local government authority for disposal recommendations. Dispose of contents/container in accordance with local/regional/national/international regulations. Normally suitable for incineration by an approved agent.

14. TRANSPORT INFORMATION

Road and Rail Transport

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

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:

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

Subclasses:

Subclass 6.1 Category E - Substances which are acutely toxic. Subclass 6.3 Category B - Substances that are mildly irritating to the skin.

Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2017 Approval Number: HSR002503

Hazard Statement(s):

H303 May be harmful if swallowed. H316 Causes mild skin irritation.

16. OTHER INFORMATION

Supplier Safety Data Sheet; 07/ 2016.

Safety Data Sheet



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

Reason(s) for Issue:

5 Yearly Revised 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.