

# Safety Data Sheet Epoxy Thinners Revision 3, Date 15 Mar 19

### 1. IDENTIFICATION

**Product Name Epoxy Thinners** 

Other Names No Data Available

Uses Thinner or cleaning solvent.

**Chemical Family** No Data Available **Chemical Formula** Unspecified

**Chemical Name** Contains: 2-Butoxyethanol; Xylene; MIBK

**Product Description** Blend of solvents.

# Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
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.

Organisation	Location	Telephone
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 5

**Globally Harmonised System** 



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Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of

Chemicals (GHS)

**Hazard Categories** Flammable Liquids - Category 3

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

Carcinogenicity - Category 2

Specific Target Organ Toxicity (Single Exposure) - Category 3

Aspiration Hazard - Category 1

### **Pictograms**







Signal Word Danger

Hazard Statements H226 Flammable liquid and vapour.

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.

**H304** May be fatal if swallowed and enters airways.

**H315** Causes skin irritation.

H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.

AUH066 Repeated exposure may cause skin dryness or cracking

Precautionary Statements Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.P280 Wear protective gloves/protective clothing/eye protection/face protection.

P261 Avoid breathing fumes/mists/vapours/spray.P201 Obtain special instructions before use.

**P240** Ground and bond container and receiving equipment.

**P241** Use explosion-proof electrical/ventilating/lighting and all other equipment.

P242 Use non-sparking tools.

**P243** Take action to prevent static discharges.

P235 Keep cool.

P270 Do not eat, drink or smoke when using this product.P271 Use only outdoors or in a well-ventilated area.

Response **P370 + P378** In case of fire: Alcohol resistant foam is the preferred fire-fighting medium but, if it is not available, normal foam can be used.

**P331** Do NOT induce vomiting.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water [or shower].

P301 + P310 + P330 IF SWALLOWED: Rinse mouth. Immediately call a POISON CENTRE or

doctor/physician.

**P363** Wash contaminated clothing before reuse.

**P304 + P340** IF INHALED: Remove victim to fresh air and keep comfortable for breathing.

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

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P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

Storage **P403 + P233** Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal P501 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

Dangerous Goods according to the Criteria of the Australian Code for the Transport of Dangerous Goods

by Road & Rail (ADG Code)

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Ingredients

Chemical Entity	Formula	CAS Number	Proportion
2-Butoxyethanol	C6H14O2	111-76-2	25 - 40 %
Methyl isobutyl ketone	C6H12O	108-10-1	25 - 40 %
Xylene	C8H10	1330-20-7	25 - 40 %

### 4. FIRST AID MEASURES

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

Swallowed IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a Poison Centre or doctor/physician for

advice. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an

open airway and prevent aspiration. Keep victim calm and warm - Obtain immediate medical care.

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. Get medical advice/attention.

**Skin** IF ON SKIN (or hair): Remove contaminated clothing and shoes immediately. Flush skin with running water for at least

15 minutes. For gross contamination, drench contaminated clothing and skin with plenty of water before removing

clothes. Get medical advice/attention.

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.

Keep victim calm and warm - Obtain immediate medical care.

Advice to Doctor Symptoms may be delayed. If exposed or concerned, get medical advice/attention. Treat symptomatically. Ensure

that attending medical personnel are aware of identity and nature of product(s) involved, and take precautions to

protect themselves.

Medical Conditions Aggravated

by Exposure

Repeated exposure may cause skin dryness or cracking.

### 5. FIRE FIGHTING MEASURES

General Measures If safe to do so, move undamaged containers from fire area. Cool container with water spray until well after fire is out.

Avoid getting water inside containers - Violent steam generation or eruption may occur. Large fire: Immediately

contact Fire Brigade.

Flammability Conditions HIGHLY FLAMMABLE LIQUID: Low flashpoint - Will be easily ignited by heat, sparks or flames at ambient

temperatures.

**Extinguishing Media**Use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction - Do not use water jets. Alcohol resistant

foam is the preferred firefighting medium but, if it is not available, normal foam can be used. Caution: Use of water

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spray when fighting fire may be inefficient.

Fire and Explosion Hazard Risk of violent reaction or explosion: Vapours will form explosive mixtures with air. Vapours will travel to source of

ignition and flash back. Vapours are heavier than air and will collect in low or confined areas. Vapours from runoff may create an explosion hazard. Vapours may cause dizziness or drowsiness. Containers may explode when heated.

**Hazardous Products of** 

Combustion

Fire may produce irritating, toxic and/or corrosive gases, including Carbon oxides and other organic complexes.

Special Fire Fighting Instructions

Contain runoff from fire control water - Runoff may pollute waterways; Vapours from runoff may create an explosion

**Personal Protective Equipment** Wear self-contained breathing apparatus (SCBA) in combination with normal firefighting clothing (full fire kit).

Flash Point >=23 - <=60 °C

**Lower Explosion Limit** 1.1 % **Upper Explosion Limit** 8.5 % **Auto Ignition Temperature** >400 °C **Hazchem Code** •3Y

### 6. ACCIDENTAL RELEASE MEASURES

Ensure adequate ventilation - Ventilate enclosed spaces before entering. ELIMINATE all ignition sources (no smoking, General Response Procedure

flares, sparks or flame). All equipment used in handling the product must be earthed. Do not touch or walk through

spilled material. Avoid breathing vapours and contact with eyes, skin and clothing

Large spill: Dike and collect recoverable product for salvage or recycling. Absorb residues with earth, sand or other Clean Up Procedures

non-combustible material; Use clean, non-sparking tools to collect material and place it in suitable containers for

disposal (see SECTION 13).

Containment Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Vapour-suppressing foam may be

used to control vapours; Water spray may be used to knock down or divert vapour clouds.

Decontamination Wash area, preventing runoff from entering drains.

**Environmental Precautionary** 

Measures

Spillages and decontamination runoff should be prevented from entering drains and watercourses.

**Evacuation Criteria** Spill or leak area should be isolated immediately. Keep unauthorised/unprotected personnel away. Keep upwind and

to higher ground. Large spill: Immediately contact Police or Fire Brigade; Consider downwind evacuation.

**Personal Precautionary** 

Measures

Use personal protective equipment as required (see SECTION 8). Large spill: SCBA and gas-tight suits should be worn when dealing with damaged or leaking containers and where there is no risk of ignition; SCBA and structural

firefighting uniform provide limited protection where there is a risk of ignition.

### 7. HANDLING AND STORAGE

Handling 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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep exposure to this product to a minimum, and

minimise the quantities kept in work areas. Handle and open containers carefully. Avoid breathing

fume/mist/vapours/spray and contact with eyes, skin and clothing. Use personal protective equipment as required (see SECTION 8). HIGHLY FLAMMABLE LIQUID: Keep away from heat and sources of ignition - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid contact or contamination of

product with incompatible materials (see SECTION 10).

Store in a cool (preferably below 30 °C), dry and well-ventilated place, out of direct sunlight. Keep containers dry and Storage

tightly closed; Check containers periodically for leaks. Keep cool. Keep away from heat and sources of ignition - No smoking. Use explosion-proof electrical/ventilating/lighting equipment. Keep away from food/feedstuffs and

incompatible materials (see SECTION 10). Store locked up.

Container Keep in the original container.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General COMPONENT: Xylene (CAS No. 1330-20-7):

- Safe Work Australia Exposure Standard for Xylene (o-, m-, p- isomers): TWA = 80 ppm (350 mg/m3); STEL = 150

ppm (655 mg/m3).

COMPONENT: Methyl isobutyl ketone (CAS No. 108-10-1):

- Safe Work Australia Exposure Standard: TWA = 50 ppm (205 mg/m3); STEL = 75 ppm (307 mg/m3).

COMPONENT: 2-Butoxyethanol (CAS No. 111-76-2):

- Safe Work Australia Exposure Standard: TWA = 20 ppm (96.9 mg/m3); STEL = 50 ppm (242 mg/m3); Absorption

through the skin may be a significant source of exposure (Sk).

Exposure Limits No Data Available

Biological Limits No information available.

Engineering Measures Use only outdoors or in a well-ventilated area. 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. Use explosion-proof

electrical/ventilating/lighting equipment.

**Personal Protection Equipment** - Respiratory protection: Usually, no respirator is necessary when using this product. Wear respiratory protection in

case of inadequate ventilation or if an inhalation risk exists. Recommended: Filter type A (organic vapour).

- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Protective glasses or

goggles.

- Hand protection: Wear protective gloves. Recommended: Impervious gloves, e.g. Polyvinyl alcohol, Teflon,

PE/EVAL.

- Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended:

Impervious clothes and (preferably) apron. Make sure that all skin areas are covered.

Special Hazards Precaustions

No information available.

Work Hygienic Practices

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Week there usely the flow product and shows immediately and week before

product. Wash thoroughly after handling. Remove contaminated clothing and shoes immediately and wash before

reuse.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid

AppearanceClear & bright liquidOdourCharacteristicColourColourlesspHNo Data Available

Vapour Pressure No Data Available **Relative Vapour Density** No Data Available **Boiling Point** 117 - 168 °C **Melting Point** No Data Available Freezing Point No Data Available **Solubility** Insoluble in water **Specific Gravity** 0.8100 - 0.9100 Flash Point >=23 - <=60 °C >400 °C **Auto Ignition Temp** 

**Evaporation Rate** No Data Available **Bulk Density** No Data Available **Corrosion Rate** No Data Available **Decomposition Temperature** No Data Available Density No Data Available Specific Heat No Data Available **Molecular Weight** No Data Available Net Propellant Weight No Data Available **Octanol Water Coefficient** No Data Available Particle Size No Data Available **Partition Coefficient** No Data Available Saturated Vapour Concentration No Data Available 

 Vapour Temperature
 No Data Available

 Viscosity
 No Data Available

 Volatile Percent
 No Data Available

 VOC Volume
 No Data Available

 Additional Characteristics
 No information available.

Potential for Dust Explosion Not applicable

Fast or Intensely Burning Characteristics

No information available.

Flame Propagation or Burning

Rate of Solid Materials

No information available.

Non-Flammables That Could Contribute Unusual Hazards to a Fire

No information available.

Properties That May Initiate or Contribute to Fire Intensity

HIGHLY FLAMMABLE LIQUID: Low flashpoint - Will be easily ignited by heat, sparks or flames at ambient

Reactions That Release Gases

temperatures.

Combustion may produce irritating, toxic and/or corrosive gases, including Carbon oxides and other organic

complexes.

or Vapours
Release of Invisible Flammable

Vapours and Gases

Vapours will form explosive mixtures with air.

### 10. STABILITY AND REACTIVITY

**General Information** This product is unlikely to react or decompose under normal storage conditions.

**Chemical Stability** Stable under normal storage conditions.

Conditions to Avoid

Keep away from heat and sources of ignition. Take precautionary measures against static discharge.

Materials to Avoid

Incompatible/reactive with oxidising agents, mineral acids, halogenated organic compounds and peroxides.

Hazardous Decomposition

**Hazardous Polymerisation** 

**osition** Combustion may produce irritating, toxic and/or corrosive gases, including Carbon oxides and other organic complexes.

Products

This product will not undergo polymerisation reactions.

# 11. TOXICOLOGICAL INFORMATION

### **General Information**

- Acute toxicity: Harmful if swallowed, in contact with skin and if inhaled. Effects include those consistent with central nervous system depression; adverse respiratory effects (laboured breathing, irritation of the respiratory tract, pulmonary oedema, pulmonary haemorrhage, and pulmonary inflammation).
- Skin corrosion/irritation: Causes skin irritation.
- Eye damage/irritation: Causes serious eye irritation.
- Respiratory/skin sensitisation: No information available.
- Germ cell mutagenicity: No information available.
- Carcinogenicity: Suspected of causing cancer. COMPONENT: Methyl isobutyl ketone (CAS No. 108-10-1) is classified by the IARC Monographs as "Possibly carcinogenic to humans" (Group 2B). COMPONENTS: Xylene (CAS No. 1330-20-7) and 2-Butoxyethanol (CAS No. 111-76-2) are classified by the IARC Monographs as "Not classifiable as to its carcinogenicity to humans" (Group 3).
- Reproductive toxicity: No information available.
- STOT (single exposure): May cause respiratory irritation. May cause drowsiness or dizziness.
- STOT (repeated exposure): Repeated exposure may cause skin dryness or cracking.
- Aspiration toxicity: May be fatal if swallowed and enters airways.

Acute

**Ingestion** Acute toxicity (Oral):

COMPONENT: Xylene (CAS No. 1330-20-7):

- LD50, Rats: >2,000 mg/kg bw.

COMPONENT: Methyl isobutyl ketone (CAS No. 108-10-1):

- LD50, Rats: >2,000 mg/kg bw.

COMPONENT: 2-Butoxyethanol (CAS No. 111-76-2):

- LD50, Guinea pig: 1,414 mg/kg

Other Acute toxicity (Dermal):

COMPONENT: Methyl isobutyl ketone (CAS No. 108-10-1):

- LD50, Rats: >2,000 mg/kg bw.

COMPONENT: 2-Butoxyethanol (CAS No. 111-76-2):

- LD50, Guinea pig: >2,000 mg/kg.

**Inhalation** Acute toxicity (Inhalation):

COMPONENT: Xylene (CAS No. 1330-20-7):

- LC50, Rats: 18.8 - 25.9 mg/L (6 h)

Carcinogen Category Cat. 2

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity** No information available.

Persistence/Degradability

This product is biodegradable; It will not accumulate in the soil or water or cause long term problems.

**Mobility** No information available.

**Environmental Fate** Prevent entry into drains and waterways.

Bioaccumulation Potential No information available.

Environmental Impact No Data Available

### 13. DISPOSAL CONSIDERATIONS

General Information This product may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended

use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other

means. If neither of these options is suitable, consider controlled incineration, or landfill. Dispose of contents/container as hazardous waste in accordance with local/regional/national regulations.

Special Precautions for Land Fill No information available.

### 14. TRANSPORT INFORMATION

### Land Transport (Australia)

ADG Code

Proper Shipping Name FLAMMABLE LIQUID N.O.S. (Contains: Xylene, Methyl isobutyl ketone)

Class3 Flammable LiquidsSubsidiary Risk(s)No Data Available

**EPG** 14 Liquids - Highly Flammable

 UN Number
 1993

 Hazchem
 ●3Y

 Pack Group
 III

**Special Provision**No Data Available

### Land Transport (Malaysia)

ADR Code

Proper Shipping Name FLAMMABLE LIQUID N.O.S. (Contains: Xylene, Methyl isobutyl ketone)

Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available

**EPG** 14 Liquids - Highly Flammable

UN Number 1993 Hazchem 3Y Pack Group III

**Special Provision** No Data Available

# Land Transport (New Zealand)

NZS5433

Proper Shipping Name FLAMMABLE LIQUID N.O.S. (Contains: Xylene, Methyl isobutyl ketone)

Class3 Flammable LiquidsSubsidiary Risk(s)No Data Available

**EPG** 14 Liquids - Highly Flammable

 UN Number
 1993

 Hazchem
 3Y

 Pack Group
 III

**Special Provision** No Data Available

# Land Transport (United States of America)

US DOT

Proper Shipping Name FLAMMABLE LIQUID N.O.S. (Contains: Xylene, Methyl isobutyl ketone)

Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available

**ERG** 128 Flammable Liquids (Non-Polar / Water-Immiscible)

 UN Number
 1993

 Hazchem
 3Y

 Pack Group
 III

Special Provision No Data Available

# Sea Transport

**IMDG** Code

Proper Shipping Name FLAMMABLE LIQUID N.O.S. (Contains: Xylene, Methyl isobutyl ketone)

Class3 Flammable LiquidsSubsidiary Risk(s)No Data Available

 UN Number
 1993

 Hazchem
 3Y

 Pack Group
 III

**Special Provision** No Data Available

# Air Transport

IATA DGR

Proper Shipping Name FLAMMABLE LIQUID N.O.S. (Contains: Xylene, Methyl isobutyl ketone)

Class3 Flammable LiquidsSubsidiary Risk(s)No Data Available

 UN Number
 1993

 Hazchem
 3Y

 Pack Group
 III

**Special Provision** No Data Available

### **National Transport Commission (Australia)**

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

Dangerous Goods Classification

Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods

by Road & Rail (ADG Code)

### 15. REGULATORY INFORMATION

General InformationNo Data AvailablePoisons Schedule (Aust)Schedule 5

# **Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code Not Assessed

# National/Regional Inventories

Australia (AICS) 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) Not Determined

Malaysia (EHS Register) Not Determined

New Zealand (NZIoC) Not Determined

Philippines (PICCS) Not Determined

Switzerland (Giftliste 1) Not Determined

Switzerland (Inventory of Notified

Substances)

Not Determined

Taiwan (NCSR) Not Determined

**USA (TSCA)** Not Determined

## **16. OTHER INFORMATION**

**Related Product Codes** SOLBLE3430, SOLBLE3431, SOLBLE3432

Revision 3

**Revision Date** 15 Mar 2019

### Key/Legend

< Less Than

> Greater Than

**AICS** Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square CentimetresCO2 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/cm³ Grams per Cubic Centimetre

**g/I** 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

inH2O Inch of Water K Kelvin

kg Kilogram

kg/m³ Kilograms per Cubic Metre

**Ib** Pound

**LC50** LC stands for lethal concentration. LC50 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.

**LD50** LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

**Itr** or **L** Litre

m³ Cubic Metre

mbar Millibar

**mg** Milligram

mg/24H Milligrams per 24 Hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH2O 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