



# SAFETY DATA SHEET

## 1. IDENTIFICATION

**PRODUCT(S):** EPOXY HARDENER

**Supplier In Australia:** Concept Paints  
**Address:** 26 - 30 Charles Street, St Marys, Australia. 2760  
**Telephone Number:** +61 2 96732555  
**Emergency Telephone:** +61 2 96732555 (Monday to Friday 8am to 5pm)

**Supplier In NZ:** Concept Paints NZ  
**Address:** 39 Burrows Street, Tauranga, New Zealand  
**Telephone Number:** +64 7 557 1638  
**Emergency Telephone:** +64 7 557 1638 (Monday to Friday 8am to 5pm)

**Recommended Use:** Commercial and Industrial Coating

## 2. HAZARDS IDENTIFICATION

**Classification:**

- **HAZARDOUS SUBSTANCE.**
- **DANGEROUS GOODS.** (According to the criteria of ADG Code and NZ 5433.)

| CLASSIFICATION              | GHS CATEGORY | NZ CATEGORY          | SIGNAL WORD | HAZARD STATEMENT   |
|-----------------------------|--------------|----------------------|-------------|--|
| Flammable Liquids           | 2            | 3.1B                 | Danger      | Highly flammable liquid and vapour.  |
| Acute Toxicity – Oral       | 4            | 6.1D<br>(Oral)       | Warning     | Harmful if swallowed.  |
| Acute Toxicity – Inhalation | 4            | 6.1D<br>(Inhalation) | Warning     | Harmful if inhaled.  |
| Skin Corrosion/ Irritation  | 3            | 6.3B                 | Warning     | Causes mild skin irritation.   |
| Eye Damage/ Irritation      | 2A           | 6.4A                 | Warning     | Causes serious eye irritation.   |
| Sensitisation – Respiratory | 1A           | 6.5A                 | Danger      | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Sensitisation – Skin        | 1B           | 6.5B                 | Warning     | May cause allergic skin reaction.  |

|   |  |      |      |                                      |
|---|--|------|------|--------------------------------------|
| Exotoxic To<br>Terrestrial<br>Vertebrates |  | 9.3B | None | Toxic to terrestrial<br>vertebrates. |
|---|--|------|------|--------------------------------------|

**Hazard Symbols:**



**Precautionary Statements:**

- Keep away from heat/sparks/open flames/ hot surfaces. No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilation/lighting/equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Wear protective gloves/protective clothing/eye protection/face protection.
- In case of inadequate ventilation wear respiratory protection.
- Call a POISON CENTER or doctor/physician if you feel unwell.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- Rinse mouth.
- IF ON SKIN (or hair): Remove /take off immediately all contaminated clothing. Rinse skin with water/shower.
- If skin irritation occurs or rash occurs: Get medical advice/attention.
- Contaminated work clothing should not be allowed out of the workplace.
- Wash contaminated clothing before reuse.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
- If eye irritation persists: Call a POISON CENTER or doctor/physician.
- IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
- If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
- Collect spillage.
- Store in a well-ventilated place. Keep cool.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Entity / Hazardous Component  | CAS Numbers | Proportion by wt. |
|--|-------------|-------------------|
| Hexamethylene Diisocyanate Homopolymer | 28182-81-2  | 30 – 60%          |
| Methyl Isobutyl Ketone                 | 108-10-1    | 30 – 60%          |
| N-Butyl Acetate                        | 123-86-4    | 10 – 30%          |
| Methoxy Propyl Acetate                 | 108-65-6    | <10%              |

This product(s) also contains <10% of other ingredients which are considered non-hazardous in accordance with ASCC/NOHSC and NZ HSNO criteria.

### 4. FIRST AID MEASURES

| Route of Exposure        | First Aid Measures  |
|--------------------------|---|
| <b>Ingestion:</b>        | Give a glass of water. Do NOT induce vomiting. Place patients head downwards if vomiting occurs. Prevent it entering lungs, as aspiration of material into the lungs can cause chemical pneumonitis which can be fatal. Immediately call a POISON CENTER or doctor/physician.   |
| <b>Eye:</b>              | Immediately irrigate with large quantities of water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists: Call a POISON CENTER or doctor/physician.   |
| <b>Skin:</b>             | Wash exposed area thoroughly with soap and water. Remove contaminated clothing. If skin irritation occurs: Get medical advice/attention.  |
| <b>Inhaled:</b>          | Give fresh air, careful not to become a casualty yourself. Remove and loosen clothing. If breathing is normal make patient comfortable and keep warm till recovered. If breathing is difficult ensure the airways are clear and have a qualified person give oxygen from a face mask. If breathing has stopped commence (EAR) and if cardiac arrest has occurred, commence (CPR) and get medical advice/attention urgently. |
| <b>Advice To Doctor:</b> | Treat Symptomatically.  |

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Foam, Carbon Dioxide or Dry Chemical Powder.

**Hazards from Combustion Products:** If involved in a fire, toxic materials such as carbon monoxide, carbon dioxide, nitrogen oxide, isocyanate vapour, traces of hydrogen cyanide, hydrogen chloride gas, hydrogen fluoride gas, various chlorine and/or fluorine compounds as well as hydrocarbons may form.

**Precautions for Firefighters:** Heating can cause rupture of containers with explosive force. If safe do so, remove all sources of ignition and any containers from the path of the fire. Keep cool with water spray.

Firefighters should wear self contained breathing apparatus with a full face and operated in the positive pressure mode.

**Hazchem Code:** 3[Y]E

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** In case of an accidental release or spill, evacuate the danger area. Wear the correct Personal Protective Equipment (See section 8 of SDS). Do not breathe vapours. Extinguish all ignition sources and shut off the source of the spill. Ventilate the area.

**Environmental Precautions:** Avoid release to the environment by bunding or covering drains.

**Containment:** Contain and absorb the spill with absorbent material such as sand, soil or vermiculite. Transfer the material into drums, using non-sparking tools. Seal and label the drums. Contact the appropriate waste management authority for disposal.

## 7. HANDLING AND STORAGE

**Precautions For Safe Handling:** Wear the correct Personal Protective Equipment (See Section 8 of the SDS) when using this product. Ground the container and receiving equipment whilst using. Only use non-sparking tools and take precautionary measures against static discharge.

Only use in a well-ventilated area or preferably apply the product in a spray paint booth with an adequate exhaust system and explosion-proof electrical, ventilation, and lighting equipment.

Never eat, drink or smoke whilst handling this product. Always wash hands thoroughly after using this product and before smoking, eating, drinking or using the toilet.

**Conditions For Safe Storage:** Keep containers away from heat/sparks/open flames/ hot surfaces. Store containers in a well-ventilated area and away sources of ignition, oxidising agents and/or foodstuffs. Store containers in a cool place and out of direct sunlight. Keep containers tightly closed when not in use and check regularly for leaks.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| <b>Exposure Limits:</b>                | <b>TLV –TWA (mg/m<sup>3</sup>)</b> |
|--|------------------------------------|
| Hexamethylene Diisocyanate Homopolymer | Not Available                      |
| Methyl Isobutyl Ketone                 | 205                                |
| N-Butyl Acetate                        | 713                                |
| Methoxy Propyl Acetate                 | 274                                |

**Engineering Controls:** Ensure sufficient ventilation to maintain concentration below exposure standard. Only use in a well ventilated area or preferably apply the product in a spray paint booth with an adequate exhaust system. Keep containers sealed when not in use. Earth any mixing vessels when using this product.

**Personal Protection:** Skin contact should be avoided by wearing impervious work clothing, boots and Neoprene or PVC gloves. Eyes should be protected by chemical goggles or safety glasses fitted with side shields (Refer to AS/NZS 1337). If an inhalation risk exists, an organic vapour respirator or a self-contained breathing apparatus, with a full face and operated in the positive pressure mode, should be used. Ensure cartridges are correct for the potential air contamination (Refer to AS/NZS 1715 and 1716).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                      |                               |
|----------------------|-------------------------------|
| Appearance:          | Clear thin liquid.            |
| Odour:               | Strong solvent odour.         |
| pH:                  | Not applicable.               |
| Vapour Pressure:     | 8 kPa @ 20°C                  |
| Vapour Density:      | Not Available                 |
| Boiling Point Range: | 96 – 145°C                    |
| Melting Point:       | Not Applicable                |
| Solubility In Water: | Not Available                 |
| Specific Gravity:    | 0.90 – 1.00                   |
| Flammability Limits: | 1 (LEL) to 8% (UEL) by volume |
| Flash Point:         | 18°C (Closed Cup)             |

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under ordinary conditions of use and storage.

**Conditions to Avoid:** Avoid all ignition sources.

**Incompatible Materials:** None

**Hazardous Decomposition Products:** If involved in a fire, toxic materials such as carbon monoxide, carbon dioxide, nitrogen oxide, isocyanate vapour, traces of hydrogen cyanide, hydrogen chloride gas, hydrogen fluoride gas and various chlorine and fluorine compounds and hydrocarbons may form.

**Hazardous Reactions:** Exothermic reaction with amines and alcohols. Reacts slowly with water forming Carbon Dioxide.

## 11. TOXICOLOGICAL INFORMATION

There is no data available on this product itself. The following information (where available) relates to the individual ingredients of the product.

### Acute Toxicity – Oral:

| Ingredient             | Value (LD50) | Species    | GHS Category |
|------------------------|--------------|------------|--------------|
| Methyl Isobutyl Ketone | 1600 mg/kg   | Guinea Pig | 4            |

**Health Effects:** Harmful if swallowed.

**Acute:** Can result in headaches, nausea, vomiting and diarrhoea.

**Chronic:** May cause irritation to the mucous membranes of the digestive system. May result in damage to the liver and kidney, blood disorders and may affect the central nervous system.

---

### Acute Toxicity – Dermal:

| Ingredient    | Value (LD50) | Species | GHS Category |
|---------------|--------------|---------|--------------|
| Not Available |              |         |              |

**Health Effects:**

---

### Acute Toxicity – Inhalation:

| Ingredient                             | Value (LC50)            | Species | GHS Category |
|--|-------------------------|---------|--------------|
| Hexamethylene Diisocyanate Homopolymer | 18500 mg/m <sup>3</sup> | Rat     | 4            |

**Health Effects:** Harmful if inhaled.

**Acute:** Vapour concentrations above exposure limits may be irritating to the respiratory tract, may cause headaches and dizziness. Prolonged exposure may result in unconsciousness.

**Chronic:** Vapour concentrations above exposure limits may cause irritation to the mucous membranes of the respiratory system. May result in damage to the liver and kidney, blood disorders and may affect the central nervous system.

---

| Skin Corrosion/Irritation: | GHS Category |
|----------------------------|--------------|
| Methyl Isobutyl Ketone     | 3            |

**Health Effects:** Causes mild skin irritation.

**Acute:** Causes skin irritation.

**Chronic:** May cause dermatitis and eczema.

**Eye Damage/Irritation:**  
Methyl Isobutyl Ketone

**GHS Category**  
2A

**Health Effects:** Causes serious eye irritation.

**Acute:** Causes redness, tearing or blurred vision.

**Chronic:** Will cause discomfort and may cause redness, itching or blurred vision.

---

**Respiratory or Skin Sensitation:**  
Hexamethylene Diisocyanate Homopolymer  
Hexamethylene Diisocyanate Homopolymer

**GHS Category**  
1A  
1B

**Health Effects:** May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction.

---

**Germ Cell Mutagenicity:**  
Not Available

**GHS Category**

**Health Effects:**

---

**Carcinogenicity:**  
Not Available

**GHS Category**

**Health Effects:**

---

**Toxic To Reproduction:**  
Not Available

**GHS Category**

**Health Effects:**

---

**Specific Target Organ Toxicity (Single Exposure):**  
Not Available

**GHS Category**

**Health Effects:**

---

**Specific Target Organ Toxicity (Repeated Exposure):**  
Not Available

**GHS Category**

**Health Effects:**

---

**Aspiration Hazard**  
Not Available

**GHS Category**

**Health Effects:**

---



## 12. ECOLOGICAL INFORMATION

**Environmental Precautions:** Avoid release to the environment, the product should not be allowed to enter drains, water courses or the soil.

There is no data available on this product itself. The following information (where available) relates to the individual ingredients of the product.

### Hazardous To The Aquatic Environment – Acute Hazard:

| Ingredient    | Value (LC50) | Species | GHS Category |
|---------------|--------------|---------|--------------|
| Not Available |              |         |              |

**Effects:**

---

### Hazardous To The Aquatic Environment – Long Term Hazard:

| Ingredient    | Value (LC50) | Species | GHS Category |
|---------------|--------------|---------|--------------|
| Not Available |              |         |              |

**Effects:**

---

### Exotoxic To Terrestrial Vertebrates:

| Ingredient             | Value (LD50) | Species | NZ Category |
|------------------------|--------------|---------|-------------|
| Methyl Isobutyl Ketone | 100 mg/kg    | Bird    | 9.3B        |

**Effects:** Harmful to terrestrial vertebrates.

---

**Persistence and Degradability:** No information available.

**Bioaccumulative Potential:** No information available.

**Mobility in Soil:** No information available.

### 13. DISPOSAL CONSIDERATIONS

Contact the relevant waste management authority. Normally suitable for incineration by an approved agent.

### 14. TRANSPORT INFORMATION

#### ADG (Land):

Shipping Name: PAINT  
UN Number: 1263  
Hazard Class: 3  
Subsidiary Risk: Not Applicable  
Packaging Group: II  
Hazchem: 3[Y]E

#### NZS 5433:

Shipping Name: PAINT  
UN Number: 1263  
Hazard Class: 3  
Subsidiary Risk: Not Applicable  
Packaging Group: II  
Hazchem: 3[Y]E

#### IMGD (Sea):

Shipping Name: PAINT  
UN Number: 1263  
Hazard Class: 3  
Subsidiary Risk: Not Applicable  
Packaging Group: II  
Marine Pollutant: No  
EmS: F-E,S-E

#### ICAO/IATA (Air):

Shipping Name: PAINT  
UN Number: 1263  
Hazard Class: 3  
Subsidiary Risk: Not Applicable  
Packaging Group: II

### 15. REGULATORY INFORMATION

Poisons Schedule: Schedule 5  
HSNO Group Standard: HSR002662 - Surface Coatings and Colourants (Flammable)

### 16. OTHER INFORMATION

Date of Issue: 05/07/13  
Replaces Issue Dated: 01/02/10

The above information has been presented in good faith and is accurate to the best of our knowledge, at the time of preparation. All of the information supplied herein is related only to the health and safety issues of the product. Users should assume all responsibility for its use, as the conditions under which this product is used are beyond our control. For technical information on the use of this product users should consult the appropriate Technical Data Sheet.

**END OF SDS**