# Safety Data Sheet

Date of Issue: September 26
(Supersedes September 21)

# Liquid Crystal Part B

## Section 1: Identification of the substance/mixture and of the supplier

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| Product Name: | Liquid Crystal Part B. |
| Product Use: | Decorative, clear epoxy coating when mixed with Liquid Crystal Part A. |
| Pack Size: | 4.74 litres. |
| Company: | Real World Epoxies Pty Ltd |
| Address: | U19/10 Miltiadis Street<br>Acacia Ridge<br>QLD 4110 |
| Emergency Phone: | 0408 877 256 |

## Section 2: Hazards Identification

GHS Classification:

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| Skin Corrosion: | Category 1B. |
| Serious Eye Damage: | Category 1. |
| Skin Sensitisation: | Category 1. |
| Chronic Aquatic Toxicity: | Category 2. |
| Specific Target Organ Toxicity: (Repeated Exposure - Oral) | Category 2. |

GHS Label:



Signal Word: Danger

Precautionary Statements:
Hazard:
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H373a - May cause damage to organs through prolonged or repeated exposure if swallowed.
H411 - Toxic to aquatic life with long lasting effects.

Prevention:
P261 - Avoid breathing dust/fumes/gas/mist/vapours/spray.
P264 - Wash skin thoroughly after handling.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release into the environment.
P280 - Wear protective gloves/eye protection/face protection.

Response:
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P321 - Specific treatment (see supplement first aid instructions on this label).
P332 + P313 - If skin irritation occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.

Disposal:
P501 - Dispose of contents/container in accordance with local and federal regulations.

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.

Other:
Corrosive
Components of the product may affect the nervous system.
Severe eye irritant.

## Section 3: Composition/information on ingredients

| INGREDIENT | CAS NUMBER | PROPORTION % |
|---|---|---|
| 4,4'-Methylenebis(cyclohexylamine) | 135108-88-2 | 30-60 |
| The remaining products are trade secrets | | to 100 |

## Section 4: First-aid measures

General Advice: Seek medical advice. If breathing has stopped or is laboured give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped begin cardiopulmonary resuscitation immediately.

Ingestion: DO NOT INDUCE VOMITING. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side.

Inhalation: If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.

Skin Contact: Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Flush immediately with copious amounts of water. Initiate and maintain continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing.

Eye Contact: If contact with the eye(s) occurs, wash with copious amounts of water holding eyelid(s) open remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. Take care not to rinse contaminated water into the non-affected eye. If symptoms persist seek medical attention, preferably an ophthalmologist. Suitable emergency eye wash facilities should be available in the work area.

Advice to Doctor: Treat symptomatically.

Other: For advice, contact a Poisons Information Center, e.g. Australia 131 126.

## Section 5: Fire-fighting measures

Suitable Extinguishing Equipment: Use water spray, foam or dry chemical to fight fire.

Hazards Arising from Chemical: Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

Protective Equipment for Firefighters: Full protective clothing and self-contained breathing apparatus required.

## Section 6: Accidental release measures

Personal Precautions: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

Environmental Precautions: Do not allow to enter sewers or drainage. Construct a dike with absorbent, liquid-binding material to prevent spreading.

Methods for Clean Up: Scrape up and place in suitable container for disposal. Wash area with solvent. Dispose of material as contaminated waste in accordance with local and federal regulations.

## Section 7: Handling and storage

Handling: Use only in well-ventilated areas. Avoid breathing vapors and/or aerosols. Avoid contact with skin and eyes. Avoid contact with eyes. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Use personal protective equipment. When using, do not eat, drink or smoke.

Storage: Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place. Product may partially freeze with extended exposure to cold temperatures, resulting in crystallization, haziness or separation. If this occurs, product should be warmed to 100-140°F (38-60°C) for one hour and stirred until clear.

## Section 8: Exposure controls and personal protection

Exposure Standards: No exposure standards have been established for this material by the Australian National Occupational Health and Safety Commission (NOHSC) or the Occupational Safety and Health Service (OHS) of the New Zealand Department of Labour.

Engineering Controls: Mechanical local exhaust at point of contaminant release if conditions warrant.

Personal Protection: Where ventilation is inadequate the use of an Air Purifying Respirator with a replaceable organic vapour filter complying with AS/NZS 1715 and AS/NZS 1716 is recommended. Safety glasses with side shields, goggles or full-face shield as appropriate recommended. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337. Wear gloves of impervious material such as impervious PVC or rubber gloves. Reference should be made to AS/NZS 2161.1. Suitable work wear should be worn to protect personal clothing. Industrial clothing should conform to the specifications detailed in AS/NZS 2919.

## Section 9: Physical and chemical properties

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| Appearance: | Colourless, low-viscosity liquid. | | |
| Packaging: | 5-litre plastic drum with screw top lid. | | |
| Odour: | Slight ammoniacal odour. | Odour Threshold: | Not determined. |
| pH: | Alkaline. | Melting/Freezing Point: | Not determined. |
| Initial Boiling Point: | Not determined. | Boiling Point Range: | >200°C. |
| Flashpoint: | >100°C. | Evaporation Rate: | Not determined. |
| Flammability: | Not applicable. | Flammability Limits: | Not applicable. |
| Vapour Pressure: | <10.5mmHg @ 21°C. | Vapour Density: | Not determined. |
| Relative Density: | 1.01kg/L | Solubility in Water: | <0.1g/L. |
| Partition Co-efficient: | Not determined. | Auto ignition Temp: | Not applicable. |
| Decomposition Temp.: | Not determined. | Viscosity: | Not determined. |

## Section 10: Stability and reactivity

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| Chemical Stability: | The product is stable under normal conditions. |
| Conditions to Avoid: | Mixing large volumes of Part A and Part B - expect a significant exotherm within 20-25 minutes at 25°C. |
| Incompatible Materials: | Reactive metals (e.g. sodium, calcium, zinc etc.).<br>Materials reactive with hydroxyl compounds.<br>Organic acids (i.e. acetic acid, citric acid etc.).<br>Mineral acids.<br>Sodium hypochlorite.<br>Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.<br>Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.<br>Oxidizing agents. |
| Hazardous Decomposition Products: | Nitric acid.<br>Ammonia<br>Nitrogen oxides (NOx).<br>Nitrogen oxide can react with water vapors to form corrosive nitric acid.<br>Carbon monoxide.<br>Carbon dioxide ($CO_2$).<br>Aldehydes<br>Flammable hydrocarbon fragments. |

## Section 11: Toxicological information

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| Likely Routes of Exposure: | Effects on Eye - Causes eye burns. May cause blindness. Severe eye irritation.<br>Effects on Skin - Causes skin burns. If absorbed through the skin, may cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties.<br>Inhalation Effects - Harmful if inhaled and may cause delayed lung injury. Can cause severe eye, skin and respiratory tract burns. Risk of serious damage to the lungs (by inhalation). May cause nose, throat, and lung irritation. Inhalation of aerosol may cause irritation to the upper respiratory tract. May cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure.<br>Ingestion Effects - If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.<br>Symptoms - No data available. |
| Acute Toxicity: | Oral - Rat LD50 >2,000mg/kg.<br>Dermal - Rabbit LD50 >2,000mg/kg.<br>Inhalation - No applicable toxicity data.<br>Other Routes - No applicable toxicity data. |
| Skin Corrosion/Irritation: | Corrosive to the skin of a rabbit. |
| Eye Damage/Irritation: | Severe eye irritation. |
| Respiratory or Skin Sensitisation: | May cause sensitisation of susceptible persons by skin contact. |
| Carcinogenicity: | No applicable toxicity data. |
| Reproductive Toxicity: | No applicable toxicity data. |
| Germ Cell Mutagenicity: | No applicable toxicity data. |
| STOT-single Exposure: | Skin, eyes, respiratory system, central nervous system, liver, muscles. |
| STOT-repeated Exposure: | No applicable toxicity data. |
| Aspiration Hazard: | No applicable toxicity data. |

## Section 12: Ecological information

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| Toxicity: | No data is available on the product itself. |
| Persistence and Degradability: | No data is available on the product itself. |
| Bioaccumulative Potential: | No data is available on the product itself. |
| Mobility in Soil: | No data is available on the product itself. |
| Other Adverse Effects: | None known. |

## Section 13: Disposal considerations

Disposal Methods: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Residual Part B can be mixed with Part A to harden before disposal. Use industrial disposal. Comply with local, state and federal laws and regulations.

## Section 14: Transport information

ADG

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| Proper shipping name: | AMINES, LIQUID, CORROSIVE, N.O.S. (4,4'-Methylenebiscyclohexanamine) |
| Class: | 8 |
| UN/ID No: | UN 2735 |
| Packing Group: | III |
| Hazchem: | 2X |
| Marine Pollutant: | Yes. |
| Additional Information: | Classified as a Limited Quantity Shipment according to ADG Code 7 (Chapter 3.4). |

IATA

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|---|---|
| Proper shipping name: | Amines, liquid, corrosive, n.o.s. (4,4'-Methylenebiscyclohexanamine) |
| Class: | 8 |
| UN/ID No: | UN 2735 |
| Packing Group: | III |

IMDG

| | |
|---|---|
| Proper shipping name: | Amines, liquid, corrosive, n.o.s. (4,4'-Methylenebiscyclohexanamine) |
| Class: | 8 |
| UN/ID No: | UN 2735 |
| Packing Group: | III |

## Section 15: Regulatory information

Australia: All components are listed on AICS, or are exempt.

## Section 16: Other relevant information

Technical Services Information Officer: 0408 877 256

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