

MATERIAL SAFETY DATA SHEET

ULTRAKOTE SUPERCLEAR WB | Part B - HARDENER

98205

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier	Epoxy Warehouse Pty Ltd T/A Sydney Industrial Coatings
Address	6 Giffard Street, Silverwater NSW 2128
Telephone	02 9648 3019
Synonym(s)	UK-PUWB Hardener Part B
Manufacturer	ULTRAKOTE 1800 037 699 ultrakote.com.au
SDS Date	1 st November 2022

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3 (respiratory tract irritation)
Chronically hazardous to aquatic environment	Category 3
Acute toxicity, Inhalive	Category 4
Reproductive toxicity	Category 1B
Eye Irritation	Category 2A
COMBUSTIBLE LIQUID	(flammable liquid Category 4)

HAZARDOUS CHEMICAL, NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code

GHS Label elements



SIGNAL WORD

DANGER

Hazard statements

- ▶ Combustible liquid
- ▶ Causes skin irritation - may cause an allergic skin reaction
- ▶ Causes eye irritation
- ▶ May cause respiratory irritation
- ▶ May damage fertility or unborn child

Other hazards

- ▶ P102 Keep out of reach of children, P103 Read label before use

Precautionary statements

- ▶ Wear protective gloves/protective clothing, Wear eye or face protection
- ▶ Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- ▶ Avoid breathing mist/vapours/spray. Use outdoors or in a well-ventilated area. Keep container tightly closed

Response

- ▶ IF INHALED: remove to fresh air, call POISON CENTRE or doctor
- ▶ IF ON SKIN (or hair): take off contaminated clothing. Rinse skin with water/shower
- ▶ IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses carefully

Storage

Store locked up. Store in well-ventilated place. Keep cool

Disposal

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

ULTRAKOTE

PREMIUM GRADE PROTECTIVE COATINGS

3. COMPOSITION / INFORMATION ON INGREDIENTS

Common chemical name	CAS No.	% (weight)
hydrophylic aliphatic polyisocyanate	160994-68-3	70-80
contains Hexamethylene-1,6-diisocyanate concentration <0.15%		
1-methyl-2-pyrrolidinone	872-50-4	20-30

4. FIRST AID MEASURES

- Eye**
- ▶ Wash out immediately with water
 - ▶ If irritation continues, seek medical advice
 - ▶ Removing contact lenses after an eye injury should only be undertaken by skilled personnel
- Inhalation**
- ▶ Move to fresh air
 - ▶ If breathing difficulties seek medical attention
- Skin**
- ▶ Flush skin and hair with running water (and soap if available)
 - ▶ Seek medical attention in event of irritation
 - ▶ Wash contaminated clothing before re-use
- Ingestion**
- ▶ Rinse mouth with water
 - ▶ Do not induce vomiting, if in doubt contact Poisons Information Centre or doctor
- Medical attention**
- Most important symptoms and effects, both acute and delayed:**
Information found under Description of first aid measures and Indication of immediate medical attention and special treatment needed.
- Indication of any immediate medical attention and special treatment needed:**
Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

- Suitable extinguishing media**
- ▶ Water spray or fog, Foam, Dry Chemical Powder, BCF (where regulations permit), Carbon Dioxide
- Unsuitable extinguishing media**
- ▶ High volume water jet
- Specific hazards**
- ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine as ignition may result
 - ▶ May produce hazardous decomposition products such as carbon monoxide, carbon dioxide, (dense) black smoke
- Special protective equipment and precautions for Fire Fighters**
- Fire Fighting**
- ▶ Wear breathing apparatus, protective suit and gloves
 - ▶ Prevent runoff from firefighting to enter drains or watercourses
 - ▶ Isolate scene, removing all non-essential personnel
 - ▶ Cool fire-exposed containers with water spray
- Fire/Explosion Hazard**
- ▶ Combustible
 - ▶ Heating may cause expansion of containers
 - ▶ Combustion products include: carbon monoxide (CO), carbon dioxide (CO₂)
 - ▶ Thermochemical decomposition products typical of burning organic material
- Hazchem Code**
- NONE ALLOCATED**

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For minor spills

- ▶ Clean up all spills immediately
- ▶ Do not walk-through spills, material can create slippery conditions
- ▶ Use personal protective equipment, safety glasses, gloves. See Section 8
- ▶ Place spillage and cleaning media in a container for disposal

For major spills

- ▶ Evacuate personnel to a safe area. Ventilate. Move containers from spill area
- ▶ Use personal protective equipment, safety glasses, gloves
- ▶ Prevent spillage from entering drains, sewers or water course
- ▶ Contain spill with absorbent material eg sand, sawdust, earth
- ▶ Pick up and transfer to properly labelled containers. For disposal see Section 13

Environmental precautions

- ▶ Prevent spillage from entering drains, sewers or waterways
- ▶ Avoid subsoil penetration
- ▶ Advise relevant authorities if the product has caused environmental pollution

Methods and material for containment and cleaning up

- ▶ Stop leaking container. Move containers from spill area
- ▶ Contain and collect spill with absorbent material eg; sand, sawdust, earth
- ▶ Mop area with water
- ▶ Place spillage and cleaning media in a container for disposal according to local regulations

7. STORAGE AND HANDLING

Precautions for safe handling

- ▶ Wear protective clothing when risk of exposure occurs. Avoid contact with eyes and skin
- ▶ Use in a well-ventilated area, do not breathe vapour or mist
- ▶ Wash thoroughly after handling
- ▶ When handling do not eat, drink or smoke
- ▶ Keep containers securely sealed when not in use
- ▶ Do not store in unlabelled containers
- ▶ Establish good housekeeping practices
- ▶ The precautions required in the handling of isocyanates must be taken
- ▶ Protect containers against physical damage and check for leaks regularly

Conditions for safe storage

- ▶ Store in a cool, dry, well-ventilated area.
- ▶ Store away from incompatible materials and foodstuff containers
- ▶ Store away from oxidising agents (alkali and acid)
- ▶ Keep from freezing. Store between 5°C to 40°C

8. EXPOSURE CONTROLS / PERSONAL PROTECTIONS

Control parameters

Component	Regulation	Type of listing	Value/Notification
Hexamethyl-1,6-diisocyanate Homopolymer	AU OEL	TWA	0.02mg/m ³
	AU OEL	STEL	0.07mg/m ³
Hexamethyl-1,6-diisocyanate diisocyanate	AU OEL	TWA	0.02mg/m ³
	AU OEL	STEL	0.07mg/m ³
1-methyl-2-pyrrolidinone	AU OEL	TWA	103mg/m ³ / 25ppm

¹ TWA: The time-weighted average airborne concentration over an eight-hour working day, for five-day working week over an entire working life.

² STEL: Short term exposure limit, the average airborne concentration over a 15-minute period which should not be exceeded at any time during a normal eight-hour workday.

ULTRAKOTE

PREMIUM GRADE PROTECTIVE COATINGS

Exposure controls Engineering controls

- ▶ Use only in area provided
- ▶ Good general ventilation, sufficient to control worker exposure to airborne contaminants
- ▶ Process controls to ensure correct handling of containers

Personal Protective Equipment

Respiratory protection

- ▶ Respirator not necessary
- ▶ Use face mask if spraying to protect from breathing mist particles

Hand protection

- ▶ Wear gloves with chemical resistance. Neoprene, PVC, Butyl rubber
- ▶ Gloves should be examined for wear and degradation constantly

Eye protection

- ▶ Wear Safety glasses with side shields
- ▶ Chemical goggles

Skin protection

- ▶ Lightweight protective clothing when handling small quantities OTHERWISE
- ▶ Wear suitable protective clothing eg. Overalls, barrier cream

Hygiene measures

- ▶ Wash hands before breaks and immediately after handling the product
- ▶ Wash before eating, smoking, and using the toilet and at the end of the working day
- ▶ Wash contaminated clothing before re-use
- ▶ Ensure eyewash station and safety showers are close to work area



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	LIQUID	Flammability (solid, gas)	NOT AVAILABLE
Colour	CLEAR	Lower & upper explosion limit (%)	NOT AVAILABLE
Odour	MILD AMINE	Vapour pressure (kPa)	NOT AVAILABLE
Odour threshold	NOT AVAILABLE	Relative vapour density (air=1)	NOT AVAILABLE
pH	NOT AVAILABLE	Relative density (water=1)	1.1
Melting point/range (°C)	NOT AVAILABLE	Water solubility	PARTIALLY
Freezing point (°C)	NOT AVAILABLE	Partition coefficient (n-octanol/water)	NOT AVAILABLE
Boiling point (°C)	202-204	Auto-ignition temperature (°C)	NOT AVAILABLE
Flash point (°C)	91-95	Decomposition temp (°C)	NOT AVAILABLE
Viscosity	NOT AVAILABLE	Evaporation rate (Butyl acetate=1)	NOT AVAILABLE

10. STABILITY AND REACTIVITY

Reactivity

- ▶ No data available

Chemical stability

- ▶ Stable under recommended storage conditions

Conditions to avoid

- ▶ No data available

Possibility of hazardous reactions

- ▶ Exothermic reaction with amines and alcohols reacts slowly with water forming CO₂, in closed containers risk of bursting due to increase of pressure

Incompatible materials

- ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine

Hazardous Decomposition Products

- ▶ Combustion products include: carbon monoxide (CO), carbon dioxide (CO₂)

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

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

Acute toxicity	▶ hydrophylic aliphatic polyisocyanate LD50 rat: >2.000mg/kg ▶ 1-methyl-2-pyrrolidinone LD50 rat: 3914mg/kg
Carcinogenicity	▶ No data available
Respiratory/Skin sensitization	▶ hydrophylic aliphatic polyisocyanate may cause sensitization by skin contact
Germ cell mutagenicity	▶ No data available
Carcinogenicity	▶ No data available
Reproductive toxicity	▶ No data available
Developmental toxicity	▶ No data available
Specific target organ toxicity (single exposure)	▶ No data available
Repeated dose toxicity and Specific target organ toxicity (repeated exposure)	▶ No data available
Aspiration hazard	▶ No data available
Other relevant toxicity information	▶ No data available

12. ECOLOGICAL INFORMATION

Toxicity	▶ hydrophylic aliphatic polyisocyanate LC50 Danio rerio 96hours exposure value:28.3mg/l ▶ 1-methyl-2-pyrrolidinone LC50 Fish 96hours exposure value:464mg/l ▶ hydrophylic aliphatic polyisocyanate EC50 algae 72hours exposure value:>100mg/l ▶ 1-methyl-2-pyrrolidinone EC50 algae 72hours exposure value:>500mg/l ▶ 1-methyl-2-pyrrolidinone EC50 crustacea 48hours exposure value:ca.4897mg/l ▶ 1-methyl-2-pyrrolidinone EC50 crustacea 384hours exposure value:ca.133.481mg/l ▶ 1-methyl-2-pyrrolidinone NOEC crustacea 504hours exposure value:12.5mg/l ▶ hydrophylic aliphatic polyisocyanate EC50 Daphnia magna 48hours exposure value:>100mg/l
Persistence/degradability	▶ hydrophylic aliphatic polyisocyanate:2%, 28d, ie not readily degradable ▶ 1-methyl-2-pyrrolidinone: Persistence water/soil: LOW, air: LOW
Bioaccumulative potential	▶ 1-methyl-2-pyrrolidinone: LOW (BCF = 0.16)
Mobility in soil	▶ 1-methyl-2-pyrrolidinone: LOW (KOC = 20.94)
Other adverse effects	▶ Isocyanate reacts with water at interface forming CO2 and a solid insoluble polurea. This reaction is accelerated by water-soluble solvent, polyurea is inert and non-degradable

ULTRAKOTE

PREMIUM GRADE PROTECTIVE COATINGS

13. DISPOSAL CONSIDERATIONS

- Disposal method** ▶ In accordance with local council, state environmental authority and national regulations
- Contaminated packaging** ▶ Discharging waste into drains, sewers and waterways is forbidden
▶ Recycle as first consideration, landfill or incineration when recycling not possible

14. TRANSPORT INFORMATION

	ADG CODE Transport by road and rail	MARINE TRANSPORT (IMO/IMDG)	AIR TRANSPORT (ICAO/IATA)
UN Number	Not regulated	Not regulated	Not regulated
Proper Shipping Name	Not regulated	Not regulated	Not regulated
Dangerous Goods Class	Not regulated	Not regulated	Not regulated
Packing Group	Not regulated	Not regulated	Not regulated
Hazchem Code	Not regulated	Not regulated	Not regulated
Environmental Hazards	No	No	No
Specials Precautions	Keep dry, avoid heat above 50°C Keep away from alkali and acid	Keep dry, avoid heat above 50°C Keep away from alkali and acid	Keep dry, avoid heat above 50°C Keep away from alkali and acid

¹ IERG: Initial Emergency Response Guide

² ADG: Australian Dangerous Goods

³ IMO: International Maritime Organization

⁴ IMDG: International Maritime Dangerous Goods

⁵ ICAO: International Civil Aviation Organization

⁶ IATA: International Air Transport Association

15. REGULATORY INFORMATION

Safety, Health and Environmental regulations/legislation specific for the substance or mixture

Poisons Schedule Schedule 6

National Inventory (AICS) All of the components of this product are on the inventory

16. OTHER INFORMATION

Reason for Revision Information updates of all sections to comply with Code of Practice Safe Work Australia.

Abbreviations UN: United Nations
CAS Number: Chemical Abstracts Number
HMIS: Hazardous Materials Identification System
AICS: Australian Inventory of Chemical Substances
TWA: the time-weighted average airborne concentration over an eight-hour working day, for five-day working week over an entire working life.

Additional Information The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights, existing laws and legislation are observed.

Disclaimer Data provided is to best of UltraKote's knowledge and believe to be accurate and reliable as of the date of issued. However, no expressed or implied warranties are given. UltraKote cannot anticipate or control the conditions under which this information may be used. Therefore, it is user's responsibility to satisfy themselves as to the suitability and completeness of such information for their particular use. It is the responsibility of the user to ensure that the issue is current. This information given is a non-controlled document.