Date of issue: 3 July 2023 NZ Safety Data Sheet

1. Identification of the Substance/Mixture and Supplier.

Product Name:	UNIVERSAL SEALER – Part 1
Uses:	Hardener
Supplier:	Nuralite Waterproofing Ltd 60D Leon Leicester Avenue Mt Wellington Auckland 1060 New Zealand.
Telephone:	+64 9 579 2046
Web:	www.nuralite.co.nz
Emergency Telephone:	027 5350899 (General Manager) – 24 hrs
National Poisons Centre Tel:	0800 POISON (0800 764766) – 24 hrs

2. Hazards Identification.

Hazardous Status: Classified as hazardous according to the criteria of HSNO.

DG Status: Not classified as Dangerous Goods according to NZS5433

HAZARD CLASSIFICATIONS	HAZARD STATEMENTS	GHS Pictogram
Flammable liquids, Cat 4	H227 Combustible liquid.	N/A
Acute toxicity: Inhalation, Cat 4	H332 Harmful if inhaled.	
STOT-SE, Cat 3	H335 May cause respiratory irritation.	
Skin corrosion/irritation, Cat 2	H315 Causes skin irritation.	
Serious eye damage/irritation, Cat 2A/2B	H319 Causes serious eye irritation.	
Respiratory sensitisation, Cat 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
Skin sensitisation, Cat 1	H317 May cause an allergic skin reaction.	

Signal Word:	DANGER

PREVENTION STATEMENTS

P102	Keep out of reach of children.
P103	Read label before use.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P285	In case of inadequate ventilation wear respiratory protection.

RESPONSE STATEMENTS	
P370 + P378	In case of fire: Use foam, carbon dioxide or dry chemical powder for extinction.
P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
STORAGE STATEMENTS	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
DISPOSAL STATEMENTS	
P501	Do not let this product enter the environment. Do not dispose of in waterways or sewers. Dispose of this material and its container as hazardous waste, via a licensed facility. See local council for disposal/recycling information.

3. Composition/Information on Ingredients.

Chemical Entity	CAS Number	Proportion %w/w
Isocyanates, Reaction product of polyol with Methylenediphenyl diisocyanate	39420-98-9	25-50
4,4'-methylenediphenyl diisocyanate	101-68-8	10-25
methylenediphenyl diisocyanate	26447-40-5	2.5-10
Other ingredients: Non-hazardous or below the hazardous threshold – to 100%		

4. First Aid Measures.

Swallowed	If swallowed do NOT induce vomiting. Give water to drink. Get medical attention if symptoms occur.
Inhaled	If inhaled, move the victim to fresh air immediately. Begin artificial respiration if breathing has stopped. Obtain medical attention if symptoms occur.
Eye Contact	If splashed in the eyes, wash out immediately with water. Obtain medical attention if irritation occurs.
Skin Contact	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Get medical attention if symptoms occur.
Further Information	For advice contact the National Poisons Centre – 0800 POISON (0800 764 766) – or a doctor, immediately.

5. Fire-Fighting Measures.

Suitable extinguishing media	In case of fire, use water spray (fog), foam, dry chemical or CO2.
Unsuitable extinguishing media	High volume water jet.
Hazards from the substance	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products	Decomposition products may include: Carbon oxides, Nitrogen oxides, Other noxious substances.

Special precautions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental Release Measures.

Personal precautions	Wear appropriate Personal Protective Equipment (see section 8). Provide adequate ventilation.
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Spill	Cover spilled material with neutralization solution (see below) and mix Wait 15 minutes. Collect material in open-head metal containers. Repeat neutralization and cleaning process until surface is decontaminated. Apply drum lid but DO NOT secure. Allow containers to vent for 72 hours to let carbon dioxide escape. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste in accordance with federal state and local regulations. Ensure adequate ventilation. Neutralization solutions: 1. A mixture of 90% water. 3-8% ammonium hydroxide or concentrated ammonia, and 2% liquid detergent. 2. A mixture of 80% water, 20% non-ionic surfactant. Apply solution. Wait 15 minutes. Collect in open-head container. Re-apply until surface is decontaminated. Apply drum lid but DO NOT secure. Let containers vent for 72 hours allowing carbon dioxide to escape. Secure drum lid.

7. Handling and Storage.

Handling	Wear appropriate PPE, and ensure there is adequate ventilation and extraction in the work area. Avoid skin or eye contact, or breathing in the product. Follow precautions listed in section 2 for handling flammable/combustible liquids.
Storage	Keep container dry and tightly closed, in a cool, well-ventilated area, away from direct sunlight.

8. Exposure Control/Personal Protection

Exposure Standards

Product/Ingredient	**WES/TWA**	**WES/STEL**	**Reference**
Isocyanates, monomeric & polymeric (by NCO)	0.02 mg/m3	0.07 mg/m3	NZ WES

Engineering Controls	General ventilation and local exhaust should be suitable to keep vapour concentrations below WES/TWA. Ventilation equipment should be explosion-proof when operating in flammable zones.
Personal Protection	

Respiratory	Wear a vapour respirator for general handling, where WES may be exceeded. If spraying, wear an air-supplied respirator.
Eyes	Wear chemical goggles/face protection.
Hands	Wear chemical gloves – PVC, Polychlorpropene or Nitrile.
Other	Wear overalls or dust coat. Use PVC apron when handling large quantities.

9. Physical and Chemical Properties

PROPERTY	SPECIFICATION
Physical state	Thick Liquid
Colour	Tan
Odour	Aromatic
pH	No data
Boiling Pt	No data
Melting Pt	No data
Flash Pt	93℃
Explosive properties	Heating may cause an explosion.
Vapour pressure	No data
Density	SG 1.1 @ 20℃
Water Solubility	Not miscible, or difficult to mix. Reacts with water
Viscosity	Dynamic at 20 °C (68 °F): 6700 mPas
Auto Ignition temperature	Product is not self-igniting.

10. Stability and Reactivity

Stability	Thermal decomposition / conditions to be avoided: Contact with moisture, other materials that react with isocyanates, or temperatures above 350F (177C), may cause polymerization.
Possibility of hazardous reactions	Violent reaction with water at high temperatures. May produce violent reactions with bases and numerous organic substances including alcohols and amines. MDI reacts slowly with water to form Carbon Dioxide gas. This gas can cause sealed containers to expand and possibly rupture. Contact with moisture, other materials that react with isocyanates, or temperatures above 350F, may cause polymerization.
Conditions to avoid	Exposure to high temperatures. Moisture
Incompatible materials	Reacts with amines, caustic alkali solutions, alcohols, ammonia, oxidizers, acids, polyols. Reacts with water forming carbon dioxide-may rupture sealed containers if contaminated with water. May produce violent reactions with bases and numerous organic substances including alcohols and amines.
Hazardous decomposition products	Carbon dioxide, carbon monoxide, oxides of nitrogen, dense black smoke, hydrogen cyanide, isocyanic acid, other undetermined compounds.

11. Toxicological Information

Data sourced from overseas manufacturer's SDS

Acute Oral Toxicity	Not Classified
Acute Dermal Toxicity	Not Classified
Acute Inhalation Toxicity	Harmful if inhaled
Acute Aspiration Toxicity	Not Classified
Skin Irritancy/Corrosion	Causes skin irritation.
Eye Irritancy/Corrosion	Causes serious eye irritation.
Respiratory Sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled

Skin Sensitisation	May cause an allergic skin reaction
Mutagenic	Not Classified
Carcinogenic	Not Classified
Reproductive/Development Toxicity	Not Classified
STOT-SE	May cause respiratory irritation
STOT-RE	Not Classified

Toxicity Data

Product Acute Toxicity Estimate

ORAL LD50
>2000 mg/kg

DERMAL LD50
>2000 mg/kg

INHALATION LC50 (dust/mist)
>1.0 - ≤5.0 mg/L/4H

Ingredient:	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 mg/L/4H
CAS 101-68-8	2200 - Mouse	-	0.369 Dust/Mist - Rat
CAS 26447-40-5	-	>6200 - Rabbit	0.49 – Dust/Mist - Rat

12. Ecological Information

This product is not classified as Ecotoxic according to the criteria of HSNO.

Toxicity: Data not available
Persistence & Degradability: Data not available.
Mobility: Data not available.
Bioaccumulative Potential: Data not available

13. Disposal Considerations.

Do not let this product enter the environment. Do not dispose of in waterways or sewers. Dispose of this material and its container as hazardous waste, via a licensed facility. See local council for disposal/recycling information.

14. Transportation Information.

Not regulated for transport.
Keep separated from foodstuffs.

15. Regulatory Information.

Group Standard:	HSR002657 Surface Coatings & Colorants - Combustible

HSNO CONTROLS

SDS required when any quantity is present in a workplace.

At least 2 x 4.5kg powder fire extinguishers required when >500L is present in a workplace.

Emergency Response Plan and Secondary Containment required when >1000L is present in a workplace

Flammable signage required when >10,000L is stored.

Toxic signage required when >10,000L is stored.

Certified Handler	Not Required
Tracking	Not Required

This material is not subject to the following agreements:

- Montreal Protocol (Ozone Depleting Substances)
- The Stockholm Convention (Persistent Organic Pollutants)
- The Rotterdam Convention (Prior Informed Consent)

All ingredients are on the New Zealand Inventory of Chemicals (NZIoC), or exempt.

Any existing national regulations on the handling of dangerous substances should be observed.
Controls for hazardous substances are based upon current knowledge. Where multiple chemicals are stored, controls will need to take into account aggregate quantities. Contact a WorkSafe approved Compliance Certifier for further information and guidance.

16. Other Information.

HSNO = Hazardous Substances and New Organisms Act.
EPA = Environmental Protection Authority
CCID = Chemical Classification and Information Database (EPA)
NZ WES = New Zealand Work Exposure Standard
TWA = Time Weighted Average
STEL = Short Term Exposure Limit
OSHA = Occupational Safety & Health Administration (USA)

Date of SDS Preparation: 3 July 2023

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe products in terms of their safety requirements. The above details do not imply any guarantee concerning composition, properties or performance of the product.