SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE SUPPLIER

Product Name: TPO Membrane Cleaner
Uses: Cleaning Solvent
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: Classified as Dangerous Goods according to NZS5433

Hazard Classifications	Hazard Statements	GHS Pictogram
Flammable liquids, Cat 3	H226 Flammable liquid and vapour.	
Acute toxicity: Oral, Cat 4	H302 Harmful if swallowed.	
Acute toxicity: Dermal, Cat 4	H312 Harmful in contact with skin.	
Skin corrosion/irritation, Cat 2	H315 Causes skin irritation	
Serious eye damage/irritation, Cat 2A/2B	H319 Causes serious eye irritation	
Carcinogenicity, Cat 2	H351 Suspected of causing cancer.	
Reproductive toxicity, Cat 2	H361 Suspected of damaging fertility or the unborn child.	
STOT-RE, Cat 2	H373 May cause damage to organs through prolonged or repeated inhalation.	

Signal Word: DANGER

PREVENTION STATEMENTS
P102 Keep out of reach of children.
P103 Read label before use.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe mist/vapours/spray
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

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P280 Wear protective gloves/protective clothing/eye protection/face 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.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P312	IF SWALLOWED: Call a POISON CENTERor doctor/physician if you feel unwell.
P330	Rinse mouth.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P362	Take off contaminated clothing and wash before reuse.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
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 + P235	Store in a well-ventilated place. Keep cool.
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
Xylene (mixed isomers)	1330-20-7	>60
Ethyl Benzene	100-41-4	10-30
Toluene	108-88-3	0.1 -<1
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), sand, 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 inclde: 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	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE.

Handling	Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from open flames, hot surfacesand sources of ignition. Avoid formation of aerosol. Do not breathe vapours. Avoid exposure obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure.Dispose of rinse water in accordance with local and national regulations.
Storage	No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Product/Ingredient	WES/TWA	WES/STEL	Reference
Xylene(mixed isomers)	50ppm, 217mg/m3	-	NZ-WES
Ethyl Benzene	100ppm, 434mg/m3	125ppm, 543mg/m3	NZ-WES
Toluene	50ppm, 108mg/m3	-	NZ-WES

ENGINEERING CONTROLS

General ventilation and local exhaust should be suitable to keep vapour concentrations below WES/TWA. Ventilation equipment should be explosionproof when operating in flammable zones

PERSONAL PROTECTION




Respiratory	Wear a vapour respirator.
Eyes	Wear chemical goggles/face pr
Hands	Wear chemical gloves – PVC, P ɔene, c
Other	Wear overalls or dust coat. Use PVC apron when handling large quantities.

9. PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	SPECIFICATION
Physical state	Liquid
Colour	Colourless
Odour	Aromatic
pH	No data
Boiling Pt	~136°C

Melting Pt	No data
Flash	Pt 26°C
Explosive properties	Vapoursmayform explosive mixtures with air
Vapour pressure	No data
Density	No data
Water Solubility	Insoluble
Viscosity, dynamic	0.59 mPa.s
Ignition temperature	No data

10. STABILITY AND REACTIVITY

Stability	The product is stable
Possibility of hazardous reactions	Vapours may form explosive mixtures with air.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strond oxidizing agents.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decompositionproducts should not be produced.

11. TOXICOLOGICAL INFORMATION

Original data sourced from CCID – mixture rules applied

Acute Oral Toxicity	Harmful if swallowed.
Acute Dermal Toxicity	Harmful in contact with skin.
Acute Inhalation Toxicity	Not Classified
Acute Aspiration Toxicity	Not Classified
Skin Irritancy/Corrosion	Causes skin irritation.
Eye Irritancy/Corrosion	Causes serious eye irritation.
Respiratory Sensitisation	Not Classified
Skin Sensitisation	Not Classified
Mutagenic	Not Classified
Carcinogenic	Suspected of causing cancer.
Reproductive/Development Toxicity	Suspected of damaging fertility or the unborn child.
STOT-SE	Not Classified
STOT-RE	May cause damage to organs through prolongedor repeated ingestion or inhalation.

Toxicity Data
Product Acute Toxicity Estimate

ORAL LD50	>2000 mg/kg
DERMAL LD50	>2000 mg/kg
INHALATION LC50 (vapours)	>20 mg/L/4H

Ingredient:	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 mg/L/4H
Toluene	636 -Rat	-	636 -Rat
Xylene	1590 –Mouse	1100	27.6 –Vap -Rat
Ethyl Benzene	3500 –Rat	-	9.6 –Vap -Rat

12. ECOLOGICAL INFORMATION

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

Ecotoxicity Data - CCID

Product/Ingredient	Species
	FISH
Xylene	TYPE OF EXPOSURE: Static DURATION: 96 hr

	ENDPOINT: LC50 (Mortality) VALUE: 3300ug/l (= 3.3 mg/l
Ethyl Benzene	SPECIES: Oncorhynchus mykiss (Fish, fresh water) TYPE OF EXPOSURE: Static DURATION:96 hr ENDPOINT: LC50 VALUE: 4.2 mg/l
Toluene	SPECIES: Oncorhynchus mykiss Rainbow trout, donaldson trout TYPE OF EXPOSURE: DURATION:96 hr ENDPOINT: LC50 (Mortality) VALUE: 5.8 mg/l
	CRUSTACEAN
Xylene	SPECIES: Palaemonetes pugio (Crustacea) TYPE OF EXPOSURE: DURATION: 48 hr ENDPOINT: LC50 VALUE: 8500ug/l (= 8.5mg/l)
Ethyl Benzene	SPECIES: Daphnia magna (Crustacea) TYPE OF EXPOSURE: DURATION: 48 hr ENDPOINT: EC50 VALUE: 2.1 mg/
Toluene	ACUTE SPECIES: Daphnia magna (Crustacea) TYPE OF EXPOSURE: DURATION: 48 hr ENDPOINT: EC50 VALUE: 11.5 mg/ CHRONIC SPECIES: Daphnia magna TYPE OF EXPOSURE: DURATION: 21 day ENDPOINT: NOEC VALUE: 1 mg/l
	ALGAL
Xylene	SPECIES: Skeletonema costatum (Algae) TYPE OF EXPOSURE: DURATION: 72 hr ENDPOINT: LC50 VALUE: 10000 µg/l (= 10mg/l
Ethyl Benzene	SPECIES: Selenastrum capricornutum (Algae) TYPE OF EXPOSURE: DURATION: 72 hr ENDPOINT: EC50 VALUE: 4.6 mg/
Toluene	SPECIES: Selenastrum capricornutum TYPE OF EXPOSURE: DURATION: 3 day (72 hr) ENDPOINT: EC50 (Growth) VALUE: 12.500mg/

Persistence & Degradability
Xylene: Rapidly degradable
Ethyl Benzene: Rapidly degradable
Toluene: Rapidly biodegradable

Mobility
Xylene: No data
Ethyl Benzene: No data
Toluene: No data

Bioaccumulative Potential
Xylene: Not bioaccumulative
Ethyl Benzene: Not bioaccumulative
Toluene: Not bioaccumulative

13. DISPOSAL CONSIDERATION

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

Regulated for transport:	Keep separated from foodstuffs
UN Number:	1993
Proper Shipping Name:	FLAMMABLE LIQUID, NOS (Xylenes, Ethyl Benzene)
Class:	3
Packing Group:	III
Hazchem:	3Y
Marine Pollutant:	NO

15. REGULATORY INFORMATION

Group Standard: HSR002669
Surface Coatings & Colorants –Flammable,Carcinogenic

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 >1000L is stored.
Toxic signage required when >10,000L is stored.
(Class 3.1C/Flammable Liquid, Cat3) Hazardous Substances Location Compliance Certificate required for:
- >500L (closed containers >5L)
- >1500L (closed containers up to 5L)
- >250L (open containers)

(Class 3.1B, 3.1C/FlammableLiquid, Cat 2/3) Hazardous Atmosphere Zone required for:
- >100L (closed containers)
- >25L (decanting)
- >5L (open occasionally)
- >1L (open containers in continuous use)

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

Date of SDS Preparation: 7 June 2021