

PRODUCT DATA SHEET

Material and Supply Company Details:

Product Name: Aquaflex PU (Non Exposed)
Recommended Use: Elastomeric Under Tile Membrane
Supplier: Permatec Pty Ltd / T/A Aquaflex Waterproofing Products
ABN: 35-166-713-702
Address: Unit 2/45 Bay Road Taren Point NSW 2229
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Email: sales@aquaflex.com.au
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Hazard Identification

Aquaflex PU is a hazardous substance, dangerous goods Australia: This material is hazardous according to health criteria of ASCC. Hazardous category Xn harmful Xi irritant class: 6.1 Toxic Poison Schedule: S5 (Australia).

Dangerous Goods Classification

Classified as Dangerous Goods by the Criteria of the “Australian code for the Transport of Dangerous Goods by Road & Rail” and the “New Zealand NZS5433: Transport dangerous goods on land”.

Risk Phrases: Harmful by inhalation, irritating to eyes, respiratory system and skin, possible risk of irreversible effects, may cause sensitisation by inhalation and skin contact.

Composition Information

CHEMICAL ENTITY	CAS NO	PROPORTION
Urethane Prepolymer	9048-51-1	30-60%
Inert Fillers	Not Known	0-30%
Xylene	1330-20-7	30%

First Aid

If poisoning occurs, contact a doctor or poisons information Centre (Ph: Australia 131 126, New Zealand 0800 764 766)

Inhalation:	Remove patient from exposure. Remove contaminated clothing. Keep patient warm and comfortable. Keep at rest until fully recovered. Ensure airways are clear. If breathing is difficult or cyanotic (blue), have a qualified person give oxygen through face mask. If breathing stopped give immediate artificial respiration and apply external cardiac massage. Seek immediate medical advice
Skin Contact:	Promptly wash with soap and water. Remove contaminated clothing and wash before re-use. If swelling, redness, blistering or skin irritation occurs/ persists seek medical advice.
Eye Contact:	Immediately irrigate with copious quantity of clean water for at least 15 minutes. Hold eyelid open to flush product from under lid. Seek immediate medical assistance.
Ingestion:	Rinse mouth with water. Give water to drink. Do NOT induce vomiting. Seek immediate medical attention.
PPE for First Aiders:	Wear safety shoes, overalls, gloves, safety glasses. Available information suggest that gloves made from nitrile rubber should be suitable for intermittent contact. However due to variations in glove, construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking, or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.
Notes to Physician:	Treat Symptomatically. Effects may be delayed, if the patient has been subject of severe exposure then the patient should be kept under medical supervision for at least 48 hours.

Fire Fighting Measures

Product is flammable. Product contains flammable solvents. Containers may rupture / explode if subjected to high intensity heat.

Keep containers cool with water spray to prevent expansion and possible rupture. If safe to do so, remove containers away from heat source or fire

Burning may produce a dense and irritating smoke or fumes.

Fire fighters should wear self-contained breathing apparatus if there's risk of exposure to burning product.

Special Protective Equipment for Fire Fighters: Self-contained breathing apparatus should be used. Full protective gear should be worn

Specific Hazards: Combustible / flammable liquid. Combustion products may include carbon oxides (CO, CO₂) nitrogen oxides (NO, NO₂), isocyanate vapours, hydrocarbon vapours and HCN with emissions of toxic vapour, fumes and smoke. Due to reaction with water producing CO₂, a hazardous build-up of pressure could result leading to possible rupture if containers are re-sealed

Unsuitable Extinguishing Media: Foam, dry agent (carbon dioxide, dry chemical powder). Water fog or if unavailable fine water spray may be used if no other medium is available, and then large quantities. Reaction between water and hot Isocyanates may be vigorous.

Accidental Release Measure

Spills and Disposal: (Major spill)

- Clear area of personnel
- Cleaners should wear protective gear including respirator mask, goggles, safety boots, gloves and overalls
- The product is viscous and should therefore spills should be able to be confined
- Prevent product from entering waterways, product will cure in water and become like rubber
- Cover and contain with soil, sand or an absorbent material
- Shovel product into drum, allow to cure before closing the drum
- Dispose of cured product in to land fill

Spills and Disposal (Minor Spills) (Follow the above Procedure)

Personal Precautions: This information assumes a large spill: Clear area. Wear full protective gear to prevent skin and eye contact and inhalation of vapours. Prevent run off from entering water ways and drains. Cover with wet soil or wet sand. Let material react for 10 minutes. Shovel in to open containers. Wash area with water. Allow residue to react. Provide good ventilation.

Environmental Precautions: Solvents will evaporate out of the product. The product will naturally cure on contact with air and will cure quicker on contact with water to a solid rubber-like consistency and become mostly inert

Handling and Storage:

Handling: avoid eye contact and repeated or prolonged skin contact and inhalation of vapours

Storage: Store in a cool, dry area away from water, alcohols, amines, acids, alkalis, corrosive chemicals, heat sources and food. Keep dry. Product reacts with water and can lead to container rupture. Recommended storage temperature range 15 to 35°C. Do not contact with aluminium or galvanised steel. Check regularly for leaks. Unsuitable containers are: aluminium, copper, copper alloy and galvanised metals. Classified: Dangerous Good Class - 6.1. Poison Schedule: S5

Storage

Temperature: 15°C to 35°C

Exposure Controls/Personal Protection

National Occupational Exposure limits:

No value assigned for this specific material by Safe Work Australia

Biological Limit Values:

As per the "National Model Regulations for the control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have Biological Limit Allocated.

Engineering Measures:

Ensure ventilation is adequate to keep air concentrations below Exposure Standards. Vapours are heavier than air and may collect in low lying areas. Do not enter confined areas where vapours may have collected. Keep containers closed when not in use. Keep away all sources of ignition.

Respiratory Protection: Product is generally rolled and hence product is not atomised. Therefore, use in well ventilated areas should suffice. However, face shield or air mask with positive air flow should be used in areas where ventilation is inadequate

Eye Protection: Face shield or goggles should be worn

Hand Protection: Neoprene, Nitrile and PVC long gloves must be worn

Footwear: Boots or Safety foot wear

Body Protection: Coveralls

Personal Protection Equipment: Safety shoes, overalls, gloves, safety glasses. Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted. When handling individual retail packs no personal equipment is required.

Hygiene Measures: when using do not eat drink or smoke. Wash hands prior to eating, drinking or smoking, avoid contact with eyes, clothes and prolonged skin contact. Observe common sense and good industrial practices.

Physical and Chemical Properties:

Base Units:	Litres
Form:	Viscous Liquid
Colour:	Grey
Odour:	Solvent odour
Melting Point:	Not available
Solubility in Water:	Miscible
Boiling Point:	Approximately 300°C
Specific Gravity:	1.2
pH Value:	N Av
Vapour Pressure :	N Av - Relative air density (air=1) >1
Flash Point (°C):	Approximately 28°C (as for xylene)
Flammable Limits:	N Av
Kinematic Viscosity:	N Av
Other Information:	Insoluble in water soluble in most organic compounds

Typical Values only – Consult specification sheet, N Av=Not Available, N App= Not Applicable

Stability and Reactivity

Chemical Stability:	This material is thermally stable when stored and used as directed.
Conditions to Avoid:	Elevated temperatures and sources of ignition
Hazardous Decomposition Products:	Oxides of carbon and nitrogen, isocyanate vapours and hydrogen cyanides smoke and other toxic fumes.
Hazardous Reaction:	Will react exothermically with water and all organic compounds containing active hydrogen groups. Reactions with water and hot isocyanate may be vigorous.

Toxicological Information

No adverse effects expected if handled in accordance with this Safety Data Sheet.

Acute Toxicity No LD50 data available. Industrial experience in humans has not shown any links between MDI exposure and cancer development.

Inhalation: Acute Inhalation: A respiratory irritant and possible respiratory sensitiser. Repeated or prolonged inhalation of vapour at levels above the occupational exposure standard could cause respiratory sensitisation. Symptoms may include - irritation of eyes, nose, throat and lungs, possibly with dryness of throat, tightness of chest and difficulty breathing. Onset of respiratory symptoms may be delayed for several hours after exposure. A hyper-reactive response may develop to even minimal concentrations of MDI in sensitive persons. Inhalation of high concentrations will lead to anesthetic Inhalations of very high concentrations, which is unlikely as the product is usually rolled (and not atomised) can result in loss of consciousness and irregular heartbeat and prove suddenly fatal.

Skin Contact: Moderate irritation. A skin sensitiser. Prolonged contact can lead to allergic dermatitis. Animal tests have shown that respiratory sensitisation can be induced by skin contact with known sensitizers including isocyanates. Hence the need for protective clothing and gloves

Ingestion: Acute Ingestion, this is highly unlikely as the product is a thick viscous liquid and would be difficult to swallow. May produce nausea, vomiting, diarrhea and can lead to drowsiness and possible lack of consciousness

Eye contact: Both liquid and vapour are irritants.

Ecological Information

Avoid contaminating waterways. For MDI a pond study showed gross contamination caused no significant toxic effect on a wide range of Flora.

Acute & Long term aquatic hazard: No information available

Ecotoxicity: No information available

Persistence and degradability: No information available

Bioaccumulative Potential: No information available

Mobility: No information available

Disposal of Product

Disposal Consideration: Refer to State Land Waste Authority. Empty containers must be de-contaminated.

Container Disposal: Allow product to cure then dispose to land-fill

Transport Information: Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by road & rail, IMDG for marine and IATA for air. UN No.: 2810 Class: 6.1 Toxic Packing Group: 111 Hazchem: 2X

Storage and Transport: Keep apart from explosives (Class 1), heat, sources of ignition, water, food and food packaging, Store in cool dry areas.

Regulatory Information

Poisons Schedule AICS (Australia) : Australia Poisons Schedule S5

Other Information

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any other that be affected, or any hazards described in this sheet and of any precautions that should be taken. Data sheets are updated regularly, please ensure you have a

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Product Disclaimer

The information contained in this Material Data Sheet is given in good faith based upon our current knowledge and does not imply warranty, express or implied. The information is provided and the product is sold on the basis that the product is used for its intended purpose and is used in a proper workmanlike manner in accordance with the instructions of the Product Data Sheet in suitable and safe working conditions. Under no circumstances will the Company be liable for loss, consequential or otherwise, arising from the use of the product.