



PU400 TOUGH GLAZE

MATERIAL SAFETY DATA SHEET

Last Revised: 17 December 2024

1. Substance/preparation and company identification

Company: Warrior Pte Ltd
Contact address: 17 Marsiling Industrial Estate Road 1 #01-11
Singapore 739279
Telephone: +65 6364 5100
Email address: war99@singnet.com.sg

2. Composition/information on ingredients

<i>Ingredients</i>	<i>CAS No.</i>	<i>UN NO.</i>	<i>Weight %</i>
H ₂ O	7732-18-5	—	65±1%
Polyurethane	—	—	35±1%

3. Hazard identification

Polyurethane/ Acrylic Waterproofing Membrane

Hazardous ingredients: Ingredient	CAS NO	Concentration
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4. First-aid measures

Inhalation:

Move to fresh air. If not breathing, provide artificial respiration. If breathing is difficult, provide oxygen and get medical attention.

Ingestion:

Aspiration hazard if swallowed. Vomiting may occur spontaneously but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately.

Skin Contact:

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes. Lift upper and lower eyelids occasionally. Get medical attention.



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5. Fire-fighting measures

Flash point : —

Auto-ignition temperature : —

Flammable limits in air % by volume : —

Explosion :

- Above flash point, vapour-air mixtures are explosive within flammable limits noted above.
- Vapours can flow along surfaces to distant ignition source and flash back.
- Contact with strong oxidizers may cause fire.
- Sealed containers may rupture when heated.
- Sensitive to static discharge.

Fire Extinguishing Media :

- Dry chemical, foam or carbon dioxide.
- Water spray may be used to keep fire exposed.
- Keep containers cool and dilute spills to nonflammable mixtures.
- Protect personnel attempting to stop leak and disperse vapours.

Special Information :

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece.

6. Accidental release measures

- Ventilate area of leak or spill and remove all sources of ignition.
- Wear appropriate personal protective equipment in hazardous areas.
- Keep unnecessary and unprotected personnel from entering.
- Contain and recover liquid when possible.
- Use non-sparking tools and equipment.
- Collect liquid in an appropriate container or absorb with an inert material, and place in a chemical waste container.
- Do not ignite or use combustible materials such as saw dust.
- Do not flush into sewers.
- If a leak or spill has not ignited, use water spray to disperse the vapours to protect personnel attempting to stop leak, and to flush spills away from exposures.
- US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities.



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7. Handling and storage

- Protect against physical damage.
- Store in a cool, dry and well-ventilated location, away from areas where fire hazards may be acute.
- Outdoor or detached storage is preferred, separate from incompatibles.
- Containers should be bonded and grounded for transfers to avoid static sparks.
- No smoking should be allowed in storage areas.
- Use non-sparking type tools and equipment, including explosion proof ventilation.
- Containers of this material may be hazardous when empty since they retain product residues (vapours, liquid).
- Observe all warnings and precautions listed for the product.

8. Exposure controls/personal protection

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices most recent edition, for details. Use explosion-proof equipment.

Personal Respirators:

If the exposure limit is exceeded, a full face piece respirator with organic vapour cartridge may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full face piece positive-pressure and oxygen-deficient atmospheres.

Eye protection:

Use chemical safety goggles and/or a full face shield where splashing may occur. Maintain an eye-wash fountain and quick-drench facilities in work area.

Skin protection:

Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Butyl rubber is a suitable material for personal protective equipment.



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9. Physical and Chemical Properties

Form	liquid	Odour	—
Colour	Semi-translucent	Being mad taste	—
pH value	7~9	boiling temperature	100°C
Ignition temperature	—	Flash point	—
		Test method	shuts the cup
Flammability	—	Lower explosion limit/ Upper explosion limit	—
Vapour pressure	—	Vapour density	—
self-ignition temperature	—	Solubility in water	Is accommodating with the water
Volatility speed	—	Partitioning coefficient n-octanol/water (log Pow)	—

10. Stability and reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Oxidizing materials, caustics, amines, ammonia, strong bases, chloroform, chlorosulfonic acid.

Oleum, potassium-t-butoxide, heat or flame, hydrogen peroxide, nitric acid. Can attack many plastics, resin and rubber.

Conditions to Avoid:

Heat, flames, ignition sources and incompatibles.



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11. Toxicological information

Acute toxicity:

LD50 oral, rat: more than 5 mg/kg

Skin and mucous membrane compatibility, rabbit:

Skin 4 hours exposure—very slight irritant

Eyes—very slight irritant

12. Ecological information

When released into the air, this material is expected to be readily degraded by reaction with photo chemically produced hydroxyl radicals.

13. Disposal considerations

Disposal:

Dispose in a safe manner in accordance with local/national regulations. Incinerate liquid residues and solids used as spillage absorbents. Dispose only by approved contractors following regulations incinerate disposal of these materials.

14. Transport information

United Nation number (UN No):-

UN Name:-

DOT hazard classification:-

Packing Group:-

Ocean contaminants (Yes/ No): No

Specific transport measures and precautionary conditions: -

15. Regulatory information

Applicable regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 0910.1200)

Labour Safety and Health Law, Taiwan.

Rules on Hazard Communication of Dangerous and Toxic, Taiwan

16. Other Information

- Any other intended applications should be discussed with the manufacturer.
- If you have any queries relating to this MSDS, its contents or any other product safety related questions, please email war99@singnet.com.sg
- 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. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.