

Liquid Applied Waterproofing and Protective Membrane

Features

- Forms a highly elastomeric, tough and resilient membrane.
- Low VOC
- Single component.
- Easy to apply.
- High elongation.
- Excellent crack bridging properties.
- Excellent UV resistance, weather ability and color retention properties.
- Excellent resistance to water and vapour.
- High resistance against chlorides, sulphates, bacteria, oil and common fuels.

Description:

PU Chem W is a liquid applied waterproofing and protective coating for concrete structures based on a hybrid polyurethane. The polyurethane is modified with specially selected polymers to form a tough, flexible and durable coating. It is completely free from coal tar and other hazardous ingredients.

Areas:

- Waterproofing of wet areas like bathrooms, public shows and kitchens.
- Waterproofing of roofs, terraces balconies, domes, aluminum sandwich panels and corrugated sheet.
- Protective and decorative coating on exposed concrete surfaces (both vertically and horizontally).

Surface Preparation:

All the surfaces must be cleaned and made free of dust, dirt, moss, oil, grease and other loose particles. This can be achieved by grit/sand/shot blasting. As a minimum, vigorous wire brushing should be employed. All pin holes and surface defects shall be repaired with a suitable concrete repair mortar.

Priming:

PU Chem W does not require priming and can directly be applied to the concrete surface. In case of highly porous surface, a priming coat is recommended to seal the pores and stabilize the surface. The primer coat can be produced on site by diluting PU Chem W 1 to 1 with water. Apply the primer coat @ 8m²/L and allow to dry.

Mixing:

PU Chem W is a single component product but mix the contents of the pail thoroughly prior to application to remove any sediment. A slow speed drill and suitable paddle mixer shall be used to avoid the formation of air bubbles.

Application:

The coating can be applied with a brush, roller and airless spray and shall be applied in a minimum of 2 coats. The 1st coat shall be allowed to dry completely before the 2nd coat is applied. The 2nd coat shall be applied cross wise to the first coat. The coating will achieve its full strength after a curing period of 7 days.

Corner Detailing:

It is recommended to reinforced all corners with sealing strip. The sealing strip shall be embedded into the first coat whilst it is still wet and covered fully with the second coat.

Coverage:

14.38 m² at 1 mm wet film thickness of 20 Kg Pack.

10 m² at 1 mm dry film thickness of 20 Kg Pack.

Cleaning and Disposal:

Clean all the tools with water after use. Hardened materials can be removed mechanically only. Allow the waste to cure. Seal it into a suitable container and bury in landfill. Use licensed waste disposal contractor and consult the local authorities when disposing.

Storage and shelf life:

Store under cover, out of direct sunlight and protect from extreme temperatures. In tropical climate the product must be stored in air-conditioned environment (<25°C). The shelf life is up to 12 months in unopened conditions if stored as per the recommendations.

Health and Safety:

As with all construction chemicals products caution should always be exercised. Protective clothing such as gloves and goggles shall be worn. Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

Supply:

PU Chem W , 20kg Pail
Technical Data

Properties	values	Test standards
Color	Grey, White, Black	
Form	Viscous liquid	
VOC, [g/l]	<20	ASTM D 3960/D 2369
Tensile Strength[N/mm ²]	>2	ASTM D 412
Elongation, [%]	>500	ASTM D 412
Density	1.39	ASTM D 412
Solid Content	70%	
Shore 'A' hardness	50-60	ASTM D 2240
Hydrostatic pressure@5bar [50m]	No Leakage	BS EN 12390
Crack Bridging,[mm]	1.5	ASTM C 836
Low Temperatureflexibility, [°C]	-1.5	UEAtc/ASTM D5147
Chemicals resistance	Chlorides, sulphates, oil,bacteria and common fuels	ASTM D 543
Solar reflective index [SRI] [White]	>80	ASTM E 1980
Solar reflectance	>75	EN 410
Emissivity	<1	EN 673
Re-coat interval,[hours]	6	-
Full cure, [days]	7	-
Application temperature, [°C]	-5 to 45	-
Service temperature,[°C]	-10 to 70	-

All values given are subject to 5-10% tolerance.

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