

Polythane 50

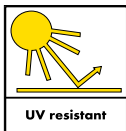
UV stable polyurethane based waterproofing coating

single component liquid applied elastomeric polyurethane based coating



CHARACTERISTICS

- ▶ Excellent UV resistance
- ▶ Good Abrasion resistant
- ▶ Excellent chemical resistance
- ▶ Ease of application. Single component
- ▶ High elastic recovery
- ▶ Good tensile strength
- ▶ Good resistance to ponded water



DESCRIPTION

Polythane 50 is a single component liquid applied elastomeric polyurethane based coating. It is designed to give long lasting, maintenance free and superior waterproofing protection for concrete and steel substrates. It is a UV stable coating and is specially formulated for external applications.

FIELDS OF APPLICATION

Can be used as waterproofing and protective coating for sloped concrete roofs & metal profile roofs

- inverted roofs
- sunken slabs
- concrete domes
- profile sheets
- kitchens & bathrooms
- terraces, balconies & patios
- basements
- bridges & tunnels

APPLICATION INSTRUCTIONS

Surface preparation

Concrete Surface: Surface preparation plays a vital role in determining the durability of any coating. Therefore proper care should be taken while executing it. The concrete should be minimum 28 days cured before the coating is applied. The surface should be free from dust, dirt, curing compound, oil, etc. Clean the surface thoroughly to remove all loosely adhering particles and cement laitance.



TDS_Polythane 50_GCC_0519

1

It is recommended to use a light mechanical grinder for cleaning. Cracks and pot holes should be repaired with suitable concrete repair system from the Polycrete* range and allow it to cure.

Steel Surface: The substrate should be abraded and preferably shot blasted with grit or steel balls. Area where steel blasting is not practical, pretreatment must be carried out with premature descaling guns, rotary wire brushes or by flash scaling. The surface should be then cleaned with a strong solvent or a detergent to remove any grease or oil contamination. The cleaned surface must be coated as soon as possible before the formation of any rust or scale.

Priming

Apply Polyprime PU* as a primer @4-5 m²/L. The coating is applied when the primer is dry. However, in all circumstance, the coating has to be applied within 24hrs of the application of primer.

Coating

Apply Polythane 50 @ 0.6 L/m² per coat. Allow it to dry for at least 12 hrs prior to the application of the second coat. The second coat is to be applied at the same coverage rate. Two coats of polythane 50 will give a dry film thickness of 1mm. Allow Polythane 50 to cure for at least 3 days.

SPECIAL NOTES

- do not apply Polythane 50 on wet or damp surfaces. ensure the moisture content of concrete surface is less than 5%. provide adequate ventilation when applying in confined spaces.
- never apply Polythane 50 on porous surfaces such as blocks, cement boards & lean cement / sand screed without the priming coat.
- for exposed areas, such as roofs & external walls, it is highly recommended to apply Polythane 50 when the atmospheric temperatures are low like early morning or evenings.

CLEANING

Tools and equipment should be cleaned immediately with Polysolvent. Hardened materials can be removed mechanically only.

STORAGE & SHELF LIFE

Store under cover, out of direct sunlight and protect from extreme temperatures. In tropical climates the product must be stored in air conditioned environment. The shelf life is minimum 6 months in unopened conditions if stored as per the recommendations.

HEALTH & SAFETY

As with all construction chemical 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.

COVERAGE

1.2 L/m² @ 1mm thickness at required no. of coats.

SUPPLY

Polythane 50	5L & 20L
Polyprime PU	5L & 20L

TECHNICAL SPECIFICATION

PROPERTIES	VALUES	TEST STANDARDS
Color	White/grey (other colors on request)	
Density [g/cc]	1.40±0.05	
Recommended thickness [min]	min. 1 mm DFT (applied in 2 coats)	
Initial cure @35°C [hrs]	24	
Full cure @35°C [days]	7	
Tensile strength, [N/mm ²]	>5	ASTM D 412
Elongation, [%]	> 500	ASTM D 412
Tear strength, [N/mm]	>10	ASTM D 1004
Shore 'A' hardness	40-50	ASTM D 2240
Hydrostatic pressure @5 bar [50m]	No leakage	BS EN 12390 (Part 8)
Chemical resistance	Dilute acids & alkalis, chlorides, sulphates, bacteria, oil and hydrocarbons	ASTM D 543
Application temperature, [°C]	+5 to 45	
Service temperature, [°C]	-5 to +70	
Crack bridging, [mm]	3	ASTM C 836
Low temperature flexibility, [°C]	-15	ASTM D 5147
UV resistance, [hours]	Passes at 300	ASTM G 154

All values given are subject to 5-10% tolerance

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.