# POLYTHANE P 10

# Liquid applied waterproofing and protective coating

Hybrid Polyurethane modified with specially selected polymers to form a tough, flexible and durable coating for concrete structures.

# **CHARACTERISTICS**

- ► Forms a highly elastomeric, tough and resilient membrane.
- ► Environmentally friendly. Low VOC
- ► Coal tar free.
- ► Single component. Easy to apply.
- ► High tensile strength & elongation
- Excellent crack bridging properties.
- ► Excellent UV resistance, weatherability & color retention properties
- ► Excellent resistance to water and vapour.
- High resistance against chlorides, sulphates, bacteria, oil and common fuels.







# **DESCRIPTION**

Polythane P 10 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.

# FIELDS OF APPLICATION

- waterproofing of wet areas like bathrooms, toilets, public showers & kitchens.
- waterproofing of roofs, terraces, balconies, domes, aluminium sandwich panels and corrugated sheets.
- protective and decorative coating on exposed concrete surfaces (both vertically and horizontally).

# **APPLICATION INSTRUCTIONS**

# 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 Polycrete\* concrete repair mortar.



# Priming

Polythane P 10 does not require priming and can directly be applied onto 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 Polythane P 10 1 to 1 with water. Apply the primer coat @ 5m²/L and allow to dry.

#### Mixina

Polythane P 10 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 or 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 glass fibre mesh sealing strip. The sealing strip shall be embedded TDS\_Polythane P 10\_RTL\_1116

into the first coat whilst it is still wet and covered fully with the second coat.

#### **COVERAGE**

1.4L/m<sup>2</sup> for 800 microns DFT in 2 coats.

# **CLEANING & 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 & 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.

20L pail

# **SUPPLY**

Polythane P 10

TECHI	NICAL	SPECI	FICATION	J
ILGIII	TICAL	OI LUI		ч.

PROPERTIES	VALUES	TEST STANDARDS		
Color	Grey/white/blac	k-		
Form	Viscous liquid	-		
Density, [g/cc]	1.22±0.02	ASTM D 1475		
Solid content, [%]	63±3	ASTM D 1644		
VOC, [g/L]	<20	ASTM D 3960 / D 2369		
Tensile strength, [N/mm²]	>2*	ASTM D 412		
Elongation, [%]	>500*	ASTM D 412		
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 temperature flexibility, [°C]	-15*	UEAtc		
Chemical 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		
Re-coat interval, [hrs]	6	-		
Full cure, [days]	7	-		
Application temperature [°C]	, 5 to 35	-		
Service temperature, [°C]-20 to 70				

All values given are subject to 5-10% tolerance

Polythane P 10 is tested in accordance with ASTM, BS EN & UEAtc standards

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  $\pm 23^{\circ}\mathrm{C}$  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.





<sup>\*</sup>Refer to website for TDS

<sup>\*</sup> Values achieved with 800 microns thickness