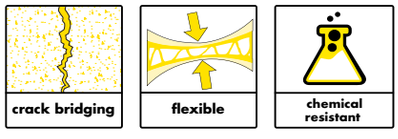
Polypur WC 40

Polyurethane resin based intermediate wear coat

Multi component high quality elastomeric intermediate polyurethane resin based wearing coat for car park deck coating system.

CHARACTERISTICS

- Flexible. Excellent crack bridging capability
- Resistant to water and vapor
- Good chemical resistance
- Can be applied on various substrates and also on cured epoxy coatings
- Available in different colors
- Easy to apply



DESCRIPTION

Polypur WC 40 is a multi component high quality elastomeric intermediate polyurethane resin based wearing coat for car park deck coating system. Polypur WC 40 is designed to provide a flexible and crack bridging waterproofing coating for highly trafficked areas.

FIELDS OF APPLICATION

Polypur WC 40 is designed as an intermediate wear resistant coating for heavily trafficked areas where crack bridging and waterproofing properties are required:

- Car park decks and ramps
- Plant rooms
- Trafficable flat roofs
- Terraces and balconies
- Industrial floors
- Chemical processing areas
- Factory ware houses

ENVIRONMENTAL INFORMATION

Contributes toward satisfying LEED® v4 requirements of the EQ Credit- Low-emitting Materials (for the VOC content)

APPLICATION INSTRUCTIONS

Surface preparation

The surface should be dry, free of any cement laitance, oil and grease, curing compound and any other contaminants, which may affect the bonding. Light mechanical scabbling, grit/captive blasting or grinding is recommended for cleaning the surface of such contaminants. New concrete surfaces should be 28 days old and the moisture content



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on the surface must be less than 5%. Refurbishment of existing or old floors must be done with a suitable repair mortar, in order to ensure that the bond between the old substrate and the new flooring system is very good. Surface irregularities and blow holes shall be repaired with Polypoxy BF (Epoxy resin based blow hole filler and skimming mortar) or Polycrete ST (cementitious repair mortar). Alternatively an epoxy resin based scratch coat can be used when repairing larger areas (> 0.5m^2). The surface after carrying out the necessary cleaning shall be vacuumed for removing the dust debris left over after the cleaning process.

Priming

Prime the prepared surface with Polyprime PU @4-5 m^2/L. The coating is applied when the primer is dry. However, in all circumstances, the coating shall be applied within 24 hours of application of the primer. If the primer surface is left open for more than 24 hours, then a fresh coat of primer has to be re-applied. Broadcast Aggregate No. 3 on the primer whilst it is still wet @0.3 kg/m^2. After the primer dries off, brush away or vacuum out the excess aggregates.

Intermediate Wear Coat

Polypur WC 40 shall be applied as the intermediate wear coat. This coating is supplied in three pre-weighed packs (resin, hardener and filler). Take a suitable container and

pour the resin (A) into it. Add the hardener (B) into the resin and mix thoroughly with a proprietary paddle mixer fitted to a slow speed drill for 2 -3 minutes, until a homogenous consistency is obtained. Slowly pour the part C (filler) into the mixing vessel and further mix for 2-3 minutes. Work the mixer round the mixing vessel to ensure it scrapes the side and bottom of the pail. Once the material is mixed properly, pour the material onto the primed surface and spread it evenly with a notched trowel. Once the material is evenly spread, use a spike roller to take out the entrapped air. Stop spiking as soon as the coating starts to gel. Whilst the wear coat is still wet, broadcast Aggregate No.3@ approx 2-4 kg/m^2 (depending on the wear coat thickness and if required). Allow to cure for 24 hours after which excess aggregates should be brushed away.

Top Coat

An abrasion resistant top coat is recommended to be applied on top of the wear coat to protect the surface from mechanical damage. For internal covered areas, Polypur TC 10 (polyurethane resin based coating) and for external exposed areas, Polypur TC 20 (UV stable polyurethane coating) shall be applied as the abrasion resistant, hard wearing top coat. Allow the coated system to cure for 7 days, after which it can be subjected to heavy traffic.

CLEANING

Clean all the tools with Polysolvent immediately after application. Hardened materials can be removed by mechanically only.

COVERAGE

Polyprime PU	4-5 m^2/L
Aggregate No. 3	0.3 kg/m^2 as bonding key on primer 2-4 kg/m^2 on PU wear coat
Polypur WC 40	0.5-1.0 L/m^2
Polypur TC 10	5 m^2/L/coat
Polypur TC 20	5 m^2/L/coat

DISPOSAL

Allow the waste to cure. Seal it into a suitable container and use licensed waste disposal contractor. Consult the local authorities when disposing.

STORAGE & SHELF LIFE

Store all material in a cool, covered dry place. Do not expose the pails to direct sunlight and keep away from all sources of heat. In tropical climatic conditions, the product has to be stored in an airconditioned environment and protected from high humidity. The shelf life of the product is 12 months in unopened condition if stored as per the recommendations. Exposure to high temperature and humidity will result in considerable deterioration of the product and reduce its shelf life.

HEALTH & SAFETY

As with all construction chemical products, caution should always be exercised. Protective clothing such as gloves and goggles should be worn. Treat any splashes to 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.

TECHNICAL SPECIFICATION

PROPERTIES	VALUES	TEST STANDARDS
Color	Grey (other colors upon request)	-
Density, [g/cc]	1.60±0.05	ASTM D 1475
Tensile strength @ 7days, (MPa)	>13	ASTM D 412
Elongation @break @ 7days, [%]	>50	ASTM D 412
Tear resistance @ 7days, N/mm	25	ASTM D 624
Shore D Hardness @ 7days	65	ASTM D 2240
Crack bridging capability	> 0.5mm	ASTM C 836
Initial cure, [hrs]	10-12	-
Full cure, [days]	7	-
Chemical resistance	Dilute acids and alkalis, hydrocarbon fuels, solvents, oil, sea water.	
Application temp, [°C]	5 to 35	
Service temp, [°C]	-20 to 75	
Standard compliance	ASTM C 957	

All values given are subject to 5-10% tolerance

SUPPLY

Polypur WC 40	10L & 20L kit
Polyprime PU	5L & 20L kit
Polypoxy BF	3kg kit
Polycrete ST	25kg bag
Aggregate No. 3	25kg bag
Polypur TC 10	5L & 15L pail
Polypur TC 20	5L & 15L kit
Polysolvent	5L & 20L pail

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.

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