

Polyguard PE

Hydrophobic polyester resin based protective coating

CHARACTERISTICS

- ▶ Single component, easy to apply
- ▶ Very low VOC. Environment friendly
- ▶ Water based and can be used in confined and closed areas
- ▶ Excellent adhesion to concrete
- ▶ High abrasion resistance
- ▶ Excellent resistance to chloride and sulphates and wide range of chemicals
- ▶ High UV resistance and durability to long term weathering effect
- ▶ Excellent waterproofing properties
- ▶ Dual advantage of protective coating and curing compound



DESCRIPTION

Polyguard PE is a single component solvent free protective and waterproofing coating based on hydrophobic polyester resin. The coating provides superior and long lasting protection to concrete and masonry structures.

FIELDS OF APPLICATION

- used as a protective coating for below ground structures like footings and foundations Used as a protective coating for exposed concrete structures
- can be applied as curing compound on fresh concrete

APPLICATION INSTRUCTIONS

The application temperature should be between 5°C to 45°C. Application procedure may vary slightly depending upon site conditions. The general recommended for the application of the coating system is as follows:

Surface preparation

The surface must be structurally sound and free of oil, grease, dust and other contaminants which will affect the bonding. Any structural cracks and potholes shall be repaired with a suitable mortar from the Polycrete* range of repair mortars.



TDS_Polyguard PE_GCC_0519

1

Priming

For new concrete the coating can be applied directly and does not require any primer. Old and porous concrete surfaces require pre-saturation with water prior to application.

Application

Polyguard PE is a single component product, however, it is recommended to mix the contents of the pail thoroughly prior to application to remove any sediment which might have occurred during storage. The coating can be applied with a brush, roller or airless spray and shall be applied in a minimum of two coats. Apply the first coat at a coverage rate of 2.5 m²/L on the saturated surface and allow it to dry. Apply the second coat at the same coverage rate at right angle to the previous coat.

As curing compound

Immediately after removal of shutters from the freshly laid concrete, apply Polyguard PE as curing compound on the concrete surface by brush, roller or airless spray at the rate of 5m²/lt. However, prior to the application of the curing compound all traces of shuttering oil must be removed. If required apply a second coat at the same coverage rate and only after the first coat has dried completely. This will increase the curing efficiency of the compound in areas of high drying wind.

COVERAGE

The coverage varies depending on type of use and the condition of substrate:

Protective coating	2.5 m ² /L/coat for 200 microns DFT
Curing compound	5 m ² /L/coat for 100 microns DFT

CLEANING & DISPOSAL

Clean all tools with water immediately 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

The pails must be stored in a covered area, away from direct sunlight, UV and other sources of heat. The shelf life of the product is up to 12 months in un-opened conditions and if stored as per recommendations. Excessive exposure to sunlight and UV will result in deterioration of the quality of the product and reduce its shelf life.

HEALTH AND 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.

SUPPLY

Polyguard PE 20L pail

TECHNICAL SPECIFICATION

PROPERTIES	VALUES	TEST STANDARDS
Density, [g/cc]	1.3 ± 0.05	ASTM D 1475
Solids content, [% by wt]	> 54	ASTM D 1644
Solids content, [% by Vol]	> 45	ASTM D 2697
Tack free time, [mins]	10 - 15	-
Adhesion strength, [N/mm ²]	> 1.5	ASTM D 4541
Hydrostatic pressure @ 5 bar (50m)	Nil	BS EN 12390
Water absorption, [%]	< 0.2	BS 1881 Pt.122
Reduction in water absorption, [%]	90	BS 1881 Pt.122
Chemical resistance, [pH]	2.5 - 11.5	ASTM D 543
Full cure period, [days]	7	-
Application temp, [°C]	5 to 45	-
Service temp, [°C]	-20 to 75	-

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.