



Aquathane PE450

Single component, water based polyester waterproofing and protective coating

DESCRIPTION

Aquathane PE450 is a single component, high performance waterproofing, protective coating and curing compound based on water borne hydrophobic polyester resin.

Aquathane PE450 is designed to provide a high chemical and abrasion resistant coating to protect concrete elements against external physical and chemical attacks such as corrosion, chloride attacks and weathering conditions. Aquathane PE450 also works as a curing compound when applied over freshly casted concrete.

APPLICATIONS

- › Suitable for waterproofing and protection of underground structures such as foundations, irrigation tunnels and retaining walls.
- › Suitable for waterproofing and protection of exposed surfaces such as concrete roofs, balconies and bridges platforms.
- › Can be used as curing compound over freshly casted concrete.

ADVANTAGES

- › Multi-purposes product, can act as waterproofing, protective coating and curing compound.
- › Single component, ease to apply.
- › Excellent UV stability.
- › Excellent resistance to chloride and sulphate ions in addition to a wide range of chemicals.
- › Environmentally friendly, free of solvent, pitch and asbestos.
- › Economical solution.
- › Can be applied on damp concrete which is one day old.
- › Provides a durable coating with high abrasion resistance
- › Water based product, with extremely low VOC < 50 g/ltr, making it ideal for use in confined spaces.

STANDARDS

Aquathane PE450 complies with ASTM C309, Type 2, Class A and B.

METHOD OF USE

SUBSTRATE PREPARATION

The surface should be clean, sound and free from oil, grease and wax. Cement laitence, loose particles such as dirt and dust, mould release agent or curing membranes must be removed using water jetting. Porous surfaces should be thoroughly pre-soaked with clean water for 30 minutes Ensure that excess surface water is removed prior to the application of Aquathane PE450.

TECHNICAL PROPERTIES:

| | |
|------------------------------------|---|
| Density: | 1.40 ± 0.10 g/cm ³ |
| Solid content: | |
| By volume | 45 ± 5% |
| By weight | 60 ± 5% |
| Elongation: ASTM D412 | ≥ 80% @ 7 days |
| Tensile strength: ASTM D412 | ≥ 1.2 MPa @ 7 days |
| Bond strength: ASTM D7234-21 | ≥ 1.25 MPa @ 21 days |
| Water retention: ASTM C309 | Pass @ 2 coat, 5 m ² /litre/coat |
| Water permeability: DIN 1048 | Nil @ 3 bars, 72 hr |
| Application temperature: | 10 to 35°C |
| Surface Drying Time: ASTM D1640 | 35 - 45 min @ 20°C 18 - 25 min @ 30°C |
| VOC: | < 50 g/ltr |

PRIMING

Aquathane PE450 is designed to be applied over well prepared substrates directly without a primer. If the application will take place over highly absorbent/highly porous substrates or smooth fair face concrete, the substrate should be primed using Repcoat Primer.

APPLICATION

Stir the material well manually before application. Aquathane PE450 can be applied by roller, brush or airless spray. Apply the product at rate of 2.5 m²/litre per coat, the second coat should be applied after 6 to 8 hours (depending on the ambient conditions) of applying the first coat and in a perpendicular direction to the first coat to achieve a total of 800 microns wet film thicknesses (360 - 400 microns DFT).

CLEANING

All tools should be washed and cleaned immediately after use with clean water. Hardened material could only be removed mechanically.





Aquathane PE450

LIMITATIONS

- » Do not apply when there are chances of rain, or when there is standing or running water on the surface.
- » Long exposure to chemicals may result in slight colour change overtime, however this is only visual and will not affect the mechanical properties of the product.

PACKAGING

Aquathane PE450 is available in 20 litre buckets.

COVERAGE

When applied as a waterproof and protective coating:
2.5 m²/litre per coat to achieve a wet film thickness of 400 microns (180 - 200 micron DFT) per coat. Two coats are recommended. Actual coverage rates will vary depending on substrate porosity and finish.

When applied as a curing compound:
Two coats at the rate of 5 m²/litre per coat to achieve a wet film thickness of 200 microns (90 - 100 micron DFT) per coat.

STORAGE

Aquathane PE450 has a shelf life of 12 months from date of manufacture if stored in the original unopened pails at temperatures between 5°C and 25°C.

If these conditions are exceeded, contact DCP Technical Department for advice.

CAUTIONS

HEALTH AND SAFETY

As with all construction chemicals products, care should be taken during use and storage to avoid contact with skin, eyes and mouth. Wear suitable protective clothing, gloves and eye/face protection.

Should accidental skin contact occur, remove immediately with plenty of clean water. If swallowed, seek medical attention immediately - do not induce vomiting.

For further information, refer to the Material Safety Data Sheet.

FIRE

Aquathane PE450 is nonflammable.

CHEMICAL RESISTANCE

After full cure for 7 days @ 25°C, based on test method ASTM D1308 (Covered Spot - test @ 24 hr)

Aqueous Solutions

| | |
|----------------------|---|
| Tap Water | R |
| Sea Water | R |
| Sodium Chloride 3.5% | R |
| Distilled Water | R |
| Ethylene Glycol 40% | R |

R: Resistant

RS: Resistant with slight discoloration

SS: Slight softening

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A wide range of construction chemical products are manufactured by DCP which include:

- » Concrete admixtures.
- » Surface treatments
- » Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- » Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.



Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.