Product Specification

PES-CHEM 505 DAMP SEAL

PES-CHEM 505 Damp Seal is a solvent-free clear epoxy coating which exhibits outstanding adhesion even to poorly prepared or wet surfaces. This makes it the material of choice for priming green or damp concrete.

Typical applications

Ideal for coating concrete floors, problematic cementitious surfaces, wet or poorly prepared steel and as a laminating resin.

Characteristics

Appearance

Base:	Clear pale-yellow liquid
Activator:	Amber liquid
Mixed:	Pale amber liquid

Mixing Ratio

By weight:	1.65:1
By volume:	3:2

Density

Base:	1.15
Activator:	1.02
Mixed:	1.08

Solids content

100%

Sag Resistance

Nil at 6 mils

Coverage

Brush or roller applications:

The material should be applied in at a target thickness of 6 mils.

At 6 mils PES-CHEM 505 Damp Seal will have a theoretical coverage rate of 71ft² per ltr per coat.

Once cured the coated surface must have a semi-gloss finish where there are signs of excessive porosity in the surface, the coating will have a dull finish. In such circumstances or where pinhole and weak spots are evident a second coat will be required.

Cure Times

The applied material should be allowed to harden for the times indicated below before being subjected to the conditions indicated:

Usable life

50°F	90 minutes
68°F	45 minutes
86°F	22.5 minutes
104˚F	11 minutes

Minimum overcoating time

50°F	16 hours
68°F	8 hours
86°F	4 hours
104˚F	2 hours

Maximum overcoating time

50°F	72 hours
68°F	36 hours
86°F	18 hours
104˚F	9 hours

Storage life

5 years if unopened and stored in normal dry conditions (59-86°F)

Mechanical Properties

Compressive strength

Tested to ASTM D 695

8945psi (629kg/cm²)

Flexural Strength

Tested to ASTM D790

5275psi (371kg/cm²)

Hardness

Shore D to ASTM D2240

84

Pull off adhesion

Elcometer pull off adhesion tester

Dry 525psi

(cohesive in substrate)

37kg/cm²

Wet 475psi

(cohesive in substrate)

33.4 kg/cm²

Tensile Shear

Tested to ASTM D1002

On abrasive blasted mild steel with 3 mil profile

2860 psi (201 kg/cm²)

On rusted steel

2375 psi (167 kg/cm²)

Heat Resistance

Suitable for use in immersed conditions at temperatures up to 140°F. Resistant to dry heat up to 302°F dependent on load.

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Quality

All PES Products are supplied under the scope of the company's fully documented quality system.

Warranty

PES warrants that the performance of the product supplied will conform to the typical descriptions quoted within this specification provided material is stored correctly and used according to the procedures detailed in the Technical Data Sheet for the material.

Health and safety

Please ensure good practice is observed at all times during the mixing and application of this product. Protective gloves and other recommended personal protective equipment must be worn during the mixing and application of this product. Before mixing and applying the material please ensure you have read and fully understood the detailed Material Safety Data Sheet