

Product Specification



PES-CHEM 506 ALUPRIME

PES-Chem 506 Aluprime is a solvent based epoxy coating designed for the long-term protection of steel and concrete structures against corrosion.

The coating can be applied to mechanical or abrasive blast clean surfaces and will cure at temperatures as low as 41°F.

Typical applications

Pipelines, internal & external tank surfaces, sheet and bearing piles, structural steel, process equipment.

Characteristics

Appearance

Base:	Thin film liquid
Activator:	Amber liquid
Mixed:	Grey solvent-based liquid

Mixing Ratio

By weight:	4.5:1
By volume:	4:1

Density

Base:	1.15
Activator:	1.02
Mixed:	1.12

Solids content

85%

Sag Resistance

Nil at 6 mils.

Coverage

PES-Chem 506 Aluprime can be applied in a single coat or as a 2-coat system to properly prepared surfaces.

Brush, roller or spray applications:

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

At 6 mils (PES-Chem 506 Aluprime) will have a theoretical coverage rate of 71.6ft² per ltr per coat.

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	4 hours
68°F	2 hours
86°F	60 minutes
104°F	30 minutes

Minimum overcoating time

50°F	12 hours
68°F	6 hours
86°F	3 hours
104°F	90 minutes

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

Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 3 mil profile 2770 psi (195 kg/cm²)

Salt Fog Resistance

Tested to ASTM B117
Unaffected after 10,000 hrs

Corrosion Resistance

Tested to ASTM B117
Unaffected after 5000 hours

Humidity Resistance

Tested to BS3900 Part F2
Unaffected after 5000 hours

Hardness

Shore D to ASTM D2240
80

Heat Resistance

Suitable for use in immersed conditions at temperatures up to 104°F. Resistant to dry heat up to 248°F dependent on load.

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Chemical Resistance

The product resists attack by a wide variety of inorganic acids, alkalies, salts and organic media including:

<i>Typical Chemicals</i>	<i>Maximum Temperature</i>
<i>Brine</i>	104°F
<i>Crude Oil</i>	104°F
<i>Diesel</i>	104°F
<i>Hydrochloric Acid 10%</i>	104°F
<i>Naphtha</i>	104°F
<i>Phosphoric Acid 25%</i>	104°F
<i>Sodium Hydroxide 35%</i>	104°F
<i>Sulphuric acid 20%</i>	104°F

For more detailed information refer to the PES Technical Centre for advice.

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

Legal Notice: The data contained within this Product Specification is furnished for information only and is believed to be reliable at the time of issue. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the responsibility of the customer to determine the products suitability for use. PES accepts no liability arising out of the use of this information or the product described herein.