Technical Data Sheet



PES 506 Aluprime

PES 506 Aluprime is a high solids solvent-borne epoxy coating designed to provide long term corrosion protection to the externals of new and existing steel structures even when surface preparation is restricted. The material is highly resistant to marine and industrial environments, buried conditions, effluents, salt water, most chemicals and a wide range of oils.

Typical Applications

Steel structures, marine decks, steel stairways, tank externals.

Surface Preparation

All oil and grease must be removed from the surface to be coated using an appropriate cleaner such as MEK.

For optimum results the surface should be abrasive blasted to NACE Standard #2 or SSPC SP10 and a minimum blast profile of 2-3 mils using an angular abrasive. Once blast cleaned, the surface must be degreased and cleaned using MEK and all prepared surfaces must be coated before rusting or oxidation occur.

NOTE: For salt contaminated surfaces the area must be abrasive blast cleaned as above and left for 24 hours to allow any ingrained salts to come to the surface. After this period the surface must be washed with MEK prior to brush blasting to remove the surface salts. This process must be repeated until all ingrained salts have been sweated out of the surface and removed.

In all other situations, where abrasive blasting is not possible the surface should be roughened by MBX, needle gunning, grinding or wire brushing.

Mixing and Application

Do not apply when the ambient or substrate temperature is less than 50°F or when the relative humidity is greater than 90%.

Stir the contents of the Activator and Base units to reincorporate any separated material and mix the two components together thoroughly until a uniform material free of any steaks is achieved. From the commencement of mixing the whole of the material should be used within 2 hours at 68°F but maximum build properties are achieved early after mixing. For small volume mixes, the mixing ratio is 4:1 by volume.

Apply the mixed material onto the prepared surface by brush or roller. This should be in two coats at a target dry film thickness of 4-6 mils per coat using a practical coverage rate of 58 sq ft per litre per coat. Apply the second coat between 8 and 24 hours after the first and where the maximum over-coating time has been exceeded the surface should be sweep blasted or lightly abraded and cleaned prior to over-coating.

The material can also be applied by airless spray using a tip pressure of 2500psi and a spray tip size of 0.015-0.018 inch.

Cure Times

At 68°F the applied materials should be allowed to harden for the times indicated below before being subjected to the conditions indicated. These times will be extended at lower temperatures and reduced at higher temperatures:

Usable life	
Movement without load or immersion	
Light loading	
Full loading/water immersion	
Chemical Contact	

2 hours 8 hours 16 hours 3 days 5 days

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Technical Data and Performance

Volume solids	85%
Flash Point	73°F
Specific Gravity	1.30
Corrosion Resistance (ASTM B117)	5000 hours

Storage Life

Minimum of 12 months if unopened and stored in normal dry conditions (59-86°F)

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 Technical Data Sheet 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.