

Product Specification



PES 106 POWER METAL REPAIR PASTE XF

PES 106 Power Metal Repair Paste XF is a fast curing two component solvent free epoxy metal repair compound. The product has been designed for use on a wide range of metallic surfaces and once cured is readily machineable.

Typical applications

damaged pump shafts, cracked pump or valve casings, damaged flanges, leaking tank seams, cracked engine blocks, underwater surfaces, underwater hulls, underwater structures

Characteristics

Appearance

Base: Black viscous paste
Activator: White viscous paste
Mixed: Mid grey viscous paste

Mixing Ratio

By weight: 1:1
By volume: 1:1

Density

Base: 1.80
Activator: 1.80
Mixed: 1.80

Volume Capacity

33.8 in³

Solids content

100%

Sag Resistance

Nil at 0.118"

Coverage

200gm (0.44lb) of fully mixed product will give the following coverage rates –
1.2ft² at 40mil

500gm (1.1lb) of fully mixed product will give the following coverage rates –
5.38ft² at 40mil

Please note that the coverage rates quoted are theoretical and do not take into consideration the profile or condition of the surface being repaired.

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 10 minutes
68°F 5 minutes
86°F 2.5 minutes
104°F 75 seconds

Hard dry/ minimum machining time

50°F 2 hours
68°F 60 mins
86°F 30 mins
104°F 15 mins

Full Cure

50°F 8 hours
68°F 4 hours
86°F 2 hours
104°F 1 hour

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 75-micron profile
2630psi (185kg/ cm²)

Pull off Adhesion to ASTM D4541 on abrasive blasted mild steel with 75-micron profile
2205psi (155kg/ cm²)

Compressive strength

Tested to ASTM D695
8750psi (615kg/cm²)

Corrosion Resistance

Tested to ASTM B117
Minimum 5000 hours

Flexural Strength

Tested to ASTM D790
9315psi (655kg/cm²)

Hardness

Rockwell R to ASTM D785
85

Heat Distortion

Tested to ASTM D648 at 264psi fiber stress.
68°F Cure 140°F
212°F Cure 208.4°F

Heat Resistance

Suitable for use in immersed conditions at temperatures up to 140°F.
Resistant to dry heat up to 266°F dependent on load.

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Food Contact

USDA compliant for incidental food contact.

Approvals

Approved by BUREAU VERITAS for Surface Protection and Cold Repair Products applied to Marine Vessels.

Certificate No: 55258/AO BV
Expiry: 24th March 2024

Chemical Resistance

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

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.