



Product Specification

PES 101 Power Metal Paste

PES 101 Power Metal Paste

is a 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 machinable

Typical applications

Suitable for emergency repairs or part of planned maintenance to equipment such as worn or damaged pump shafts, cracked pump or valve casings, scored hydraulic rams, worn bearing housings, damaged flanges, leaking tank seams, worn keyways and cracked engine blocks.

The material can also be used as a gap filling adhesive.

Characteristics

Appearance

Base: Dark Grey Paste
Activator: Light grey paste
Mixed: Mid grey paste

Mixing Ratio

By weight: 5:1
By volume: 3:1

Density

Base: 2.70
Activator: 1.70
Mixed: 2.46

Volume Capacity

24.7 cu in

Solids content

100%

Slump Resistance

Nil at .78"

Useable Life

50°F 50-60 minutes
68°F 25-30 minutes
86°F 15-20 minutes

Coverage

1Kg will cover 0.68 sq ft at a nominal thickness of 1/4".

Cure Times

Once hardened, material should be left for the following periods of time at 68°F before being subjected to the conditions indicated. These times will be doubled at 50°F and halved at 86°F.

Movement without load or immersion hours 1.5

Machining and light loading hours 2

Full loading 2 days

Immersion 3 days

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

Compressive strength

Tested to ASTM D 695

15,300psi 1075kg/cm²

Corrosion Resistance

Tested to ASTM B117

Minimum 5000 hours

Flexural Strength

Tested to ASTM D790

10,000psi 703kg/cm²

Hardness

Rockwell R to ASTM D785

100

Heat Distortion

Tested to ASTM D648 at 264psi fiber stress.

68°F Cure 136.40°F
212°F Cure 208.40°F

Heat Resistance

Suitable for long term water immersion at temperatures up to 158°F and intermittent contact with pressurized steam up to 248°F.

Resistant to dry heat in excess of 392°F dependent on load.

Chemical Resistance

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



Product Specification

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.