

# Product Specification



## PES 201 Ceramic Repair Paste

### PES 201 Ceramic Repair

**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 subject to abrasion and impact.

### Typical Applications

Suitable for emergency repairs or part of planned maintenance to equipment such as worn impellers, damaged valves, eroded separator housings, damaged pump casings, eroded pipe work, propellers, bow thrusters, rudders, corroded water boxes and eroded end plates and tube sheets.

### 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 inch

### Useable Life

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

### Coverage

1Kg will cover 0.68 sq ft @1/4" thickness.

### 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	1.5
hours	
Machining and light loading	2
hours	
Full loading	2
days	
Immersion	3
days	

### Storage life

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

## Mechanical Properties

### Abrasion Resistance

Taber CS17 Wheels/1 Kg load  
147mg loss/1000 cycles  
0.06cc loss/1000 cycles

### Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 3 mil. angular profile  
2675psi (188kg/cm<sup>2</sup>)

### Compressive strength

Tested to ASTM D 695  
15,500psi (1089kg/cm<sup>2</sup>)

### Corrosion Resistance

Tested to ASTM B117  
Minimum 5000 hours

### Flexural Strength

Tested to ASTM D790  
10,000psi (703kg/cm<sup>2</sup>)

### Hardness

Rockwell R to ASTM D785  
100

### Heat Distortion

Tested to ASTM D648 at 264psi fiber stress.  
68°F Cure 135 °F  
212°F Cure 205°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.

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## Chemical Resistance

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

## Quality

All PES Products are supplied under the scope of the manufacturers 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.