



## 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.

### Surface Preparation

All oil and grease must be removed from the surface of the repair using an appropriate cleaner such as MEK. For optimum performance, the surface should be abrasive blasted to SSPC SP10 and a minimum blast profile of 3-4 mils using an angular abrasive. Once blast cleaned, the surface must be degreased and cleaned using MEK or similar type material. All surfaces must be repaired before gingering or oxidation occurs.

PLEASE NOTE: For salt contaminated surfaces the area must be abrasive blast cleaned as mentioned above and left for 24 hours to allow any ingrained salts to come to the surface. After this 24 hour 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 contaminants have been sweated out of the surface.

### Mixing and Application

***Warm the Base to 59-77°F before mixing and do not apply when the ambient or substrate temperature is below 41°F or the relative humidity is above 90%.***

Mixing of the product can be on full units or by part-mixing. If mixing the whole unit please ensure as much of the base and activator is dispensed from the plastic container onto a clean plastic mixing surface and mix using a spatula until a uniform material free of any streakiness is achieved while ensuring no unmixed material is left on the spatula or the mixing surface. From the commencement of mixing the whole of the material should be used within 25-30 minutes at 68°F.

For part mixing, using a spatula place 3 equal measures from the base unit onto a clean plastic mixing surface. Clean the spatula thoroughly and then take 1 equal measure from the Activator unit and place alongside the base measures. Mix as above.

Using a spatula or applicator tool, apply the material to the blast prepared surface, ensuring the product is pressed into any holes, scars or cracks and profile the repair to a smooth finish.

# Technical Data Sheet



## 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	25-30 minutes
Movement without load or immersion	1.5 hours
Full loading	2 days
Immersion	3 days

## For Optimum Performance

After an initial curing period of at least 4 hours at 68°F, raising the cure temperature progressively to 140 - 212°F for up to 8 hours will result in improved mechanical, thermal and chemical resistance properties

## Over-coating times

Minimum - the applied material can be over-coated as soon as it is touch dry.

Maximum - the over-coating time should not exceed 3 hours.

Where the maximum over-coating time is exceeded, the material should be allowed to harden before being abraded or flash blasted to remove surface contamination.

## Storage Life

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

## Technical data and Performance

Volume capacity	24.7 cu in
Compressive Strength ASTM D695	(15,500psi) 1089kg/ cm <sup>2</sup>
Tensile Shear Adhesion (mild steel) ASTM D1002	(2675psi) 188kg/cm <sup>2</sup>
Flexural Strength ASTM D790	10,000psi 703kg/ cm <sup>2</sup>
Hardness Rockwell R ASTM D785	100
Corrosion Resistance (ASTM B117)	5000 hours

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## Health and Safety

Please ensure good practice is observed at all times during the mixing and application of this product. Protective gloves 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.