



PES 202 Ceramic Repair Fluid – solvent-free epoxy fluid with hardened ceramic fillers

PES 202 Ceramic Repair Fluid is an erosion/ corrosion resistant coating for heavy abrasion environments. The product contains hardened ceramic fillers and is ideal for protecting metallic surfaces in aggressive fluid flow environments.

- Apply to abrasive blast-cleaned surfaces
- Apply to surfaces repaired using PES 101 Power Metal Repair Paste or 201 Ceramic Repair Paste
- Ideal for protecting metallic surfaces in aggressive fluid flow environments

Typical Applications

impellers & pump casings	valves	heat exchanger end plates
water boxes	separator housings	pipes
propellers	kort nozzles	rudders
bow thrusters	ship hulls/ bow	separators

Surface Preparation

Metallic Substrates – Abrasive blast cleaning

1. All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
2. All surfaces must be abrasive blasted to **ISO 8501/4 Standard SA2.5 (SSPC SP10/ NACE 2)** minimum blast profile of 3 mils using an angular abrasive.
3. Once blast cleaned, the surface must be degreased and cleaned using MEK or similar type material.
4. All surfaces must be coated before gingering or oxidation occurs.

PLEASE NOTE: The substrate must be pressure washed with clean water for salt-contaminated surfaces and checked for salt contamination. Please refer to the surface preparation and pre-application guide for further information.

Mixing and Application

Before mixing, please ensure the following:

1. The base component is at a temperature between 60-77F°.
2. The ambient & surface temperature is above 50F°.

Once these two checks have been met, please proceed with mixing the product.

Mix the unit in full (1kg/3kg). Please follow the instructions below:

1. Pour the contents of the Activator unit into the Base container.
2. Ensure as much material as possible is drained from the Activator container into the base container.
3. Mix the two components using the spatula provided.
4. Ensure the product is streak free and a consistent color before applying to the repair surface.

From the commencement of mixing, the material should be used within 25 minutes at 68F°.



Technical Data Sheet

Application

1. Use a short bristle brush to apply the mixed material, with an approximate bristle length of 2cm.
2. Force the coating into the blast profile.
3. Apply the coating at a wet film thickness range of 10-14 mils.
4. Ensure the product is pressed into any holes, scars, or cracks.
5. Once the repair has been completed, smooth off any imperfections using a gloved hand.

Coverage Rates

1kg (2.2lb) of fully mixed product will give the following coverage rates –

- 19ft² at 10mils
- 16ft² at 12mils
- 14ft² at 14mils

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

Cure Times

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

- Usable Life 25mins
- Minimum overcoating time 2 hours
- Maximum overcoating time 6 hours
- Full cure two days

For Optimum Performance

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

Pack Sizes

This product is available in the following pack sizes –
1kg (2.2lb), 3kg (6.6lb)

Colour

Mixed material - Dark Grey, Light grey, Red, Blue
Base component – Dark Grey, Light grey, Red, Blue
Activator component –Amber liquid

Over-coating times

- Minimum - the applied material can be over-coated as soon as it is touch dry, approximately 2 hours at 68°F.
- Maximum - the over-coating time should not exceed 6 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.

Technical Data Sheet



Storage Life

Five years if unopened and stored in normal dry conditions (60-86°F)

Other Technical Documents

Quick Application Guide	-	Hand application
Safety Data Sheets	-	Base & Activator components
Product Specification Sheet	-	Technical Performance Information

Health and Safety

Please ensure that good practice is always observed. Protective gloves, goggles & a disposable coverall must be worn during the mixing and application of this product. Before mixing and applying the material, ensure you have read the detailed 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 customer's responsibility to determine if the product is suitable for use. PES accepts no liability arising from the use of this information or the product described herein.