202 CERAMIC REPAIR FLUID

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

Typical applications

Worn impellers, damaged valves, separator housings , damaged pump casings, eroded pipe work, propeller, bow thrusters, rudders, corroded water boxes end plates and tube sheets.

Characteristics

Appearance

Base: Dark Grey, Light Grey, Red, or Blue paste
Activator: Amber liquid
Mixed: Dark Grey, Light Grey, Red, or Blue

Mixing Ratio

By weight: 8:1
By volume: 3:1

Density

Base: 2.65
Activator: 1.00
Mixed: 2.24

Volume Capacity

446cc/Kg

Solids content

100%

Sag Resistance

Nil at 400microns

Coverage

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

1.78m² at 250 microns
19ft² at 10mil
1.48m² at 300 microns
16ft² at 12mil
1.28m² at 350 microns
14ft² at 14mil

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

10°C 50 minutes
20°C 25 minutes
30°C 12.5 minutes
40˚C 6 minutes

Minimum overcoating time

10°C 4 hours
20°C 2 hours
30°C 1 hour
40˚C 30 mins

Maximum overcoating time

10°C 12 hours
20°C 6 hours
30°C 3 hours
40˚C 90 mins

Full Cure

10°C 4 days
20°C 2 days
30°C 1 day
40˚C 12 hours

Storage life

5 years if unopened and stored in normal dry conditions (15-30°C)

Mechanical Properties

Abrasion Resistance

Taber CS17 Wheels/1 Kg load
20mm³ loss/1000 cycles

Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile
202kg/ cm² (2875psi)

Pull off Adhesion to ASTM D4541 on abrasive blasted mild steel with 75 micron profile
244 kg/ cm² (3480 psi)

Compressive strength

Tested to ASTM D695
960kg/cm² (13650psi)

Corrosion Resistance

Tested to ASTM B117
Minimum 5000 hours

Flexural Strength

Tested to ASTM D790
635kg/cm² (9000psi)

Hardness

Rockwell R to ASTM D785
100

Heat Distortion

Tested to ASTM D648 at 264psi fibre stress.
20°C Cure 48°C
100°C Cure 95°C

Heat Resistance

Suitable for use in immersed conditions at temperatures up to 70°C.
Resistant to dry heat up to 200°C dependent on load.

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Product Specification

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 Resimac Technical Centre for advice.

Quality
All Resimac Products are supplied under the scope of the company's fully documented quality system.

Warranty
Resimac 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

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