



204 Heavy Duty Ceramic Paste

Solvent free, high build ceramic epoxy paste designed to resist sliding abrasion in heavy duty processing environments.

- High resistance to sliding abrasion
- · Designed for small to medium particle flow
- Applies in high build layers up to 15mm without slumping
- Solvent free formulation with ceramic reinforcement



Typical Applications

204 Heavy Duty Ceramic Paste is a solvent free, two component epoxy paste reinforced with 0.2mm-1.2mm ceramic beads to provide enhanced resistance to sliding abrasion. Designed for high build application, it protects surfaces exposed to small to medium particle flow in demanding industrial conditions.

•	Internal	pipe	surfaces
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- Eroded pump casings
- Separator housings
- Valves

Chutes

- Hoppers
- · Pipe bends

Cure times

Usable Life		Min overcoating time	
10°C/50°F	100 mins	10°C/50°F	8 hours
20°C/68°F	50 mins	20°C/68°F	4 hours
30°C/86°F	25 mins	30°C/86°F	2 hours
40°C/104°F	12.5 mins	40°C/104°F	1 hour

Characteristics

Appearance	
Base	Mid Grey, Red
Activator	Dark Grey
Mixed	Mid Grey, Red

Solids Content

100%

Volume Capacity

584cc/kg

Sag Resistance

Full Cure

Nil at 15mm

Density

Base	2.10
Activator	1.40
Mixed	1.96

Mixing Ratio

By weight	4.5:1
By volume	3:1

Storage Life

5 years if unopened and stored in normal dry conditions, 15-30°C (59-86°F)

Coverage

5kg (11lb) of fully mixed product will give the following coverage rates

1.46m² at 2mm	15.70ft² at 80mil
0.73m² at 4mm	7.848ft² at 160mil

	3		
10°C/50°F	16 hours	10°C/50°F	8 days
20°C/68°F	8 hours	20°C/68°F	4 days
30°C/86°F	4 hours	30°C/86°F	2 day
40°C/104°F	2 hours	40°C/104°F	24 hours

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

Max overcoatina time

Mechanical Properties

Abrasion Resistance

Taber H10 Wheels/1kg load 66mm³ loss/1000 cycles

Compressive Strength

Tested to ASTM D695 990kg/cm² (13985psi)

Corrosion Resistance

Tested to ASTM B117 Minimum 1000 hours

Flexural Strength

Tested to ASTM D790 420kg/cm² (6000psi)

Hardness

Shore D to ASTM D2240: 89

Impact Resistance

Tested to ASTM D256: 16J/m

Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile 148kg/cm² (2100psi)

Pull off Adhesion to ASTM D4541 on abrasive blasted mild steel with 75 micron profile 272kg/cm² (3840psi)

Heat Resistance

Full immersion resistance
Tested water/hydrocarbon immersion
to 50°C (122°F)
Pass - no blisters

Dry heat resistance Tested to ASTM D2485 Pass 120°C (248°F)

Details & Legal

Chemical Resistance

The product resists attack by a wide variety of inorganic acids, alkalis, salts and organic media. For more detailed information refer to the Resimac Technical Centre for advice.

Pack Sizes

This product is available in the following pack sizes:
1.5kg (3.3lbs)
5kg (11lbs)

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 this document.

Application Guide

A. 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 75 microns (3mil) 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.

B. Product Preparation

Prior to mixing, please ensure the following:

- 1 The base component is at a temperature between 15-25°C (60-77°F).
- 2 The ambient & surface temperature is above 10°C (50°F).
- 3 The ambient & surface temperatures are not less than 3°C (6°F) above the dew point.

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

Health & 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 all information.

C. Mixing

If mixing a complete unit of material (1.5kg/5kg):

- Please ensure as much of the base and activator is dispensed from the plastic container onto a clean plastic mixing surface.
- 2 Mix using the spatula provided 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 50 minutes at 20°C (68°F).

If part mixing the unit of material:

- 1 Using a spatula place 3 equal measures from the base unit onto a clean plastic mixing surface.
- 2 Clean the spatula thoroughly.
- 3 Take I equal measure from the activator unit and place alongside the base measures.
- 4 Ensure the product is streak free and a consistent colour before applying to the repair surface.

D. Application

Step 1

Using the spatula or applicator tool, apply the material to the blast prepared surface.

Step 2

Ensure the product is pressed into any holes, scars or cracks and profile the repair to a smooth finish.

Step 3

Apply in a single coat at a typical wet film thickness of 2-4mm, or as recommended.

Quick Application Guide



Step 1

Ensure you have:
1 x base unit
1 x activator unit
1 x mixing board
1 x spatula
1 x applicator



Step 2

Take equal 3 equal measures of base material, clean the spatula, then take 1 measure of the activator.



Step 3

Mix the two components using the spatula provided, ensure any unmixed material around the edges is mixed.



Step 4

To ensure the product is fully mixed, create a diamond pattern on the surface and look for any unmixed product.



Step 5

Once the material is fully mixed use the applicator tool provided to apply the beaded ceramic repair paste to the surface.

About Resimac

A UK based manufacturer of epoxy and polyurethane coatings and repair materials.

From our head office in the heart of rural North Yorkshire, England we supply our range of Epoxy, Polyurethane & Silicone coatings and repair materials to the Oil & Gas, Petrochemical, Marine, Paper & Pulp, Water, Power Generation & Chemical Industries.

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. Resimac accepts no liability arising out of the use of this information or the product described herein.

Information & Enquiries

For more information and technical data please visit our website or contact us.

www.resimacsolutions.com

info@resimac.co.uk

+44 (0) 1845 577498

Resimac Ltd,
Unit B, Park Barn Estate,
Station Road,
Topcliffe,
Thirsk,
North Yorkshire,
Y07 3SE,
United kingdom