



resimac<sup>®</sup>

## 106 Metal Repair Paste XF

A fast curing two component solvent free epoxy metal repair compound. This product has been designed for use on a wide range of metallic surfaces.

- Applied at 20mm without slumping
- Fully machinable once cured

2024 Product Sheet



## Typical Applications

106 Metal Repair Paste XF is a fast curing two component solvent free epoxy metal repair compound. The product has been designed for use on a wide range of metallic surfaces and once cured is readily machinable.

- Damaged pump shafts
- Cracked pump or valve casings
- Damaged flanges
- Leaking tank seams
- Cracked engine blocks
- Underwater surfaces
- Underwater hulls
- Underwater structures

## Cure times

### Overview

The applied material should be allowed to harden for the times indicated below before being subjected to the conditions indicated:

Usable Life		Min machining time		Full Cure	
10°C/50°F	10 mins	10°C/50°F	90 mins	10°C/50°F	8 hours
20°C/68°F	5 mins	20°C/68°F	45 mins	20°C/68°F	5 hours
30°C/86°F	2.5 mins	30°C/86°F	22 mins	30°C/86°F	2 hours
40°C/104°F	75 secs	40°C/104°F	11 mins	40°C/104°F	1 hour

## Characteristics

### Appearance

Base	Black viscous paste
Activator	White viscous paste
Mixed	Mid grey viscous paste

### Solids Content

100%

### Volume Capacity

555cc/Kg

### Sag Resistance

Nil at 20mm

### Density

Base	1.80
Activator	1.80
Mixed	1.80

### Mixing Ratio

By weight	1:1
By volume	1:1

### Storage Life

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

## Coverage

200gm (0.44lb) of fully mixed product will give the following:

0.111m<sup>2</sup> at 1mm      1.2ft<sup>2</sup> at 40mil

500gm (1.1lb) fully mixed

0.278m<sup>2</sup> at 1mm      5.38ft<sup>2</sup> at 40mil

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

## 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.

## 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.

## 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.

## Pack Sizes

This product is available in the following pack sizes:

200gm (0.44lb)  
500gm (1.1lb)

## Mechanical Properties

### Compressive Strength

Tested to ASTM D695  
615kg/cm<sup>2</sup> (8750psi)

### Corrosion Resistance

Tested to ASTM B117  
Minimum 5000 hours

### Flexural Strength

Tested to ASTM D790  
655kg/cm<sup>2</sup> (9315psi)

### Hardness

Rockwell R to ASTM D2240:82

### Heat Resistance

Suitable for use in immersed conditions at temperatures up to 60°C (140°F)

Resistant to dry heat up to 130°C (284°F) dependent on load

### Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile 185kg/cm<sup>2</sup> (2630psi)

Pull off Adhesion to ASTM D4541 on abrasive blasted mild steel with 75 micron profile 155kg/cm<sup>2</sup> (2205psi)

### Heat Distortion

Tested to ASTM D648 at 264psi fibre stress.

20°C (68°F) Cure	58°C (136°F)
100°C (212°F) Cure	98°C (208°F)

### Food Contact

USDA compliant for incidental food contact.

# Application Guide

## A. Surface Preparation

### Metallic Substrates – Hand tools

- 1 All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
- 2 All surfaces must be cleaned using wire brush, metal file, coarse sandpaper etc.
- 3 Once abraded, the surface must be degreased and cleaned using MEK or similar type solvent.

## 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 5°C (41°F).

### Metallic Substrates – Mechanical tools

- 1 All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
- 2 All surfaces must be mechanically abraded using handheld grinders to *ISO 8501/4 ST3 (SSPC SP3)*.
- 3 Once abraded, the surface must be degreased and cleaned using MEK or similar type solvent.
- 4 All surfaces must be coated before gingering or oxidation occurs

## C. Mixing

### If part mixing the unit of material:

- 1 Using the spatula provided place 1 equal measure from the base & activator units onto the mixing board provided.
- 2 Ensure to clean the spatula thoroughly after measuring the base component and before measuring the activator component.
- 3 Mix the 2 components together until you have a streak free mix (mid grey) on the mixing board.
- 4 Ensure there is no unmixed material on the spatula or mixing board.

*PLEASE NOTE: From the commencement of mixing, the material should be used within 5 minutes at 20°C (68°F).*

## D. Application

### Step 1

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

### Step 2

Ensure the product is pressed into any holes, scars or cracks.

### Step 3

Once the repair has been completed smooth off any imperfections using a gloved hand.

## Quick Application Guide



### Step 1

Ensure you have  
1 x base unit  
1 x activator unit  
1 x spatula  
1 x applicator  
1 x clean mixing area



### Step 2

Take equal measures of base and activator materials, ensure the spatula is clean.



### 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 areas which are not mid grey in colour.



### Step 5

Once the material is fully mixed use the applicator tool provided to apply the metal repair paste to the repaired 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.

## Approvals

Approved by BUREAU VERITAS for Surface Protection and Cold Repair Products applied to Marine Vessels. Certificate No: 55268/B0 BV. Expiry: 1<sup>st</sup> June 2029.

## Information & Enquiries

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

[www.resimacsolutions.com](http://www.resimacsolutions.com)

[info@resimac.co.uk](mailto:info@resimac.co.uk)

+44 (0) 1845 577498

Resimac Ltd,  
Unit B, Park Barn Estate,  
Station Road,  
Topcliffe,  
Thirsk,  
North Yorkshire,  
YO7 3SE,  
United kingdom