

## RESIMETAL 102 Metal Repair Fluid

**Resimetal 102 Metal Repair Fluid** is a two component solvent free epoxy metal repair fluid. The product has been designed to resurface a wide range of metallic surfaces.

### Typical Applications

Suitable as a filler for heavily pitted or scarred substrates such as tank surfaces or can be used with an aggregate to create an anti-slip finish for conveyor belt rollers, metal steps and ramps.

### 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 ISO 8501/4 Standard SA2.5 (SSPC SP10/ NACE 2) and a minimum blast profile of 75 microns 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.

Where abrasive blast cleaning is not possible (excluding salt contaminated surfaces) the surface should be roughened by MBX, needle gun or grinding.

### Mixing and Application

***Warm the Base component to 15-25°C (60-77°F) before mixing and do not apply when the ambient or substrate temperature is below 5°C (40°F) or less than 3°C (37°F) above the dew point***

The whole unit must be mixed in full. Ensure as much of the activator is dispensed into the base unit. Mix the two components 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 on the sides of the base pot.

**Fairing compound** - for filling badly pitted or scarred surfaces apply the material using a rubber float across the repair surface ensuring the product is pressed into any holes or cracks. The maximum wet film thickness this material can be applied onto a vertical surfaces without sagging is 3mm (120mil/ 1/8").

**Anti-slip system** - for conveyor rollers, steps or ramps, apply the product to the surface at a wet film thickness of 500 microns (20mil) and then broadcast a suitable aggregate onto the surface (Aluminium Oxide or equivalent). Once cured brush off any excess aggregate.

**Resurfacing** - If applying as a resurfacing material to repair worn or damaged surfaces the application should be carried out in two coats. The material must be applied at a target wet film thickness of 250 microns (10mil) per coat. From the commencement of mixing the whole of the material should be used within 20-30 minutes at 20°C (68°F).

As soon as possible after application of the first layer, and after no longer than 6 hours, apply a further coat as above. If the maximum over-coating time is exceeded, the first layer should be brush blasted or abraded before applying the second coat.

## Coverage Rates

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

Fairing Compound	0.147m <sup>2</sup> at 3mm	1.6ft <sup>2</sup> at 1/8"
Anti-slip system	0.88m <sup>2</sup> at 500 microns	9.5ft <sup>2</sup> at 20mil
Resurfacing	1.76m <sup>2</sup> at 250 microns	19ft <sup>2</sup> at 10mil

*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

At 20°C (68F°) 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	30mins
Movement without load or immersion	1.5 hours
Machining and light loading	2 hours
Full loading	2 days
Immersion	3 days

## For Optimum Performance

After an initial curing period of at least 4 hours at 20°C (68F°), raising the cure temperature progressively to 60 - 100°C (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), 27kg (60lb)

## Colour

Mixed material - Dark Grey  
Base component – dark grey  
Activator component – Amber liquid

## 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 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.

## Storage Life

5 years if unopened and store in normal dry conditions (15-30°C/ 60-86F°)

## Technical data and Performance

Volume Capacity	440cc/Kg
Compressive Strength ASTM D695	1075kg/ cm <sup>2</sup> (15,300psi)
Tensile Shear Adhesion ASTM D1002	185kg/cm <sup>2</sup> (2630psi)
Flexural Strength ASTM D790	703kg/cm <sup>2</sup> 10,000psi
Hardness Rockwell R ASTM D785	100
Corrosion Resistance (ASTM B117)	5000 hours

Please see Resimetal 102 Metal Repair Fluid Product Specification Sheet for further technical and performance data.

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