RESIMETAL 104 Metal Repair Fluid XF

Resimetal 104 Metal Repair Fluid XF is a fast curing two component solvent free epoxy metal repair fluid. The product has been designed for use on a wide range of metallic surfaces where surface preparation is restricted and where the surface is contaminated with oil or grease.

Typical Applications

Suitable for emergency repairs or part of planned maintenance to equipment such as damaged flanges, leaking tank seams and pipe work.
Ideally suited for the repair and resurfacing of transformers where weeping or leaking oil is contaminating the repair surface.

Surface Preparation

Damaged components or equipment – ideal surface preparation for this material is abrasive blast cleaning to ISO 8501/4 Standard SA2.5 (SSPC SP10/ NACE 2) and with a minimum blast profile of 75 microns using an angular abrasive. However this product has been designed for surfaces with less than ideal surface preparation.
Hand tools, use a wire brush or coarse sand paper to abrade the surface. Ensure all loose material and as much surface contamination is cleaned from the surface. Ensure the surface is wiped with an appropriate solvent cleaner such as MEK prior to and after abrading the surface.

Mechanical tools, use a handheld mechanical grinder with a coarse grinding pad or rotary wire brush. Ensure all loose material and as much surface contamination is cleaned from the surface. DO NOT POLISH THE SURFACE, ENSURE THAT THE SURFACE HAS A CROSS HATCH PATTERN. Ensure the surface is wiped with an appropriate solvent cleaner such as MEK prior to and after abrading the surface.

MBX bristle blaster, for the best mechanical surface preparation results use an MBX bristle blaster. Ensure all loose material and as much surface contamination is cleaned from the surface. Ensure the surface is wiped with an appropriate solvent cleaner such as MEK prior to and after abrading the surface.

Leaking transformer surfaces – to repair a weeping/ leaking transformer surface mixed 104 Metal Repair Fluid must be applied within 10-15 seconds of the surface being cleaned. DO NOT ABRADE THE SURFACE WITH ANY MECHANICAL TOOLS. If possible use a wire brush to take off any loose corrosion or coating, then wipe the surface with a solvent wipe and take away as much excess oil as possible.

Mixing and Application

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

Mixing of the product can be on full units or by part-mixing. If mixing the whole unit please ensure as much of the base and activator is dispensed from the plastic container onto a clean plastic mixing surface and mix using a spatula until a uniform material free of any streaks 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 5 minutes at 20°C (68°F).

For part mixing, using a spatula place equal measures from the base unit onto a clean plastic mixing surface. Clean the spatula thoroughly and then take one equal measure from the Activator unit and place alongside the base measures. Mix as above.

Damaged components and equipment repairs - Using a brush or applicator tool, apply the material to the prepared surface, ensuring the product is pressed into any scars or cracks and profile the repair to a smooth finish. If required the product can be used in conjunction with reinforcement tape and used to wrap round leaking pipe work.

Leaking transformer surfaces – Use the applicator tool provided to scrape the mixed material off the mixing board, apply 104 Metal Repair Fluid XF onto the surface, press the material onto the weeping/ leaking surface. Apply the material to a target thickness of 2-3mm (up to 1/8”). Do not overwork the material on the repair surface. Once in place on the repair surface allow to cure for 20-30mins.

Coverage Rates

800gm (1.6lb) of fully mixed product will give the following coverage rates –

0.444m² at 1mm	5.9ft² at 40mil
0.222m² at 2mm	3ft² at 80mil
0.148m² at 3mm	2ft² at 1/8”

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	5mins
Movement without load or immersion	45mins
Machining and light loading	2 hours
Full loading	8 hours
Immersion	8 hours

Pack Sizes

This product is available in the following pack sizes –
250gm (0.5lb), 800gm (1.6lb), 50kg (110lb))

Colour

Mixed material - Light Grey
Base component – Black
Activator component – White

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 4 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°)

Resimac Ltd, Unit 11, Poplars Industrial Estate, Wetherby Road, Boroughbridge, North Yorkshire, UK
Tel: +44 1423 325073 Fax: +44 1423 325073 Email: info@resimac.co.uk Web: www.resimacsolutions.com

Technical Data Sheet

Technical data and Performance

Volume Capacity	555cc/Kg
Compressive Strength ASTM D695	14-18 N/mm²
Shear Strength DIN 53283	185kg/cm² (2630psi)
Lap Shear Strength ISO 4587	Steel 25 N/mm² Aluminium 15 N/ mm²
Hardness Rockwell R ASTM D785	78-80
Peel Strength ISO 4578	3-5

Please see Resimetal 104 Metal Repair Fluid XF 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.

Resimac Ltd, Unit 11, Poplars Industrial Estate, Wetherby Road, Boroughbridge, North Yorkshire, UK
Tel: +44 1423 325073 Fax: +44 1423 325073 Email: info@resimac.co.uk Web: www.resimacsolutions.com