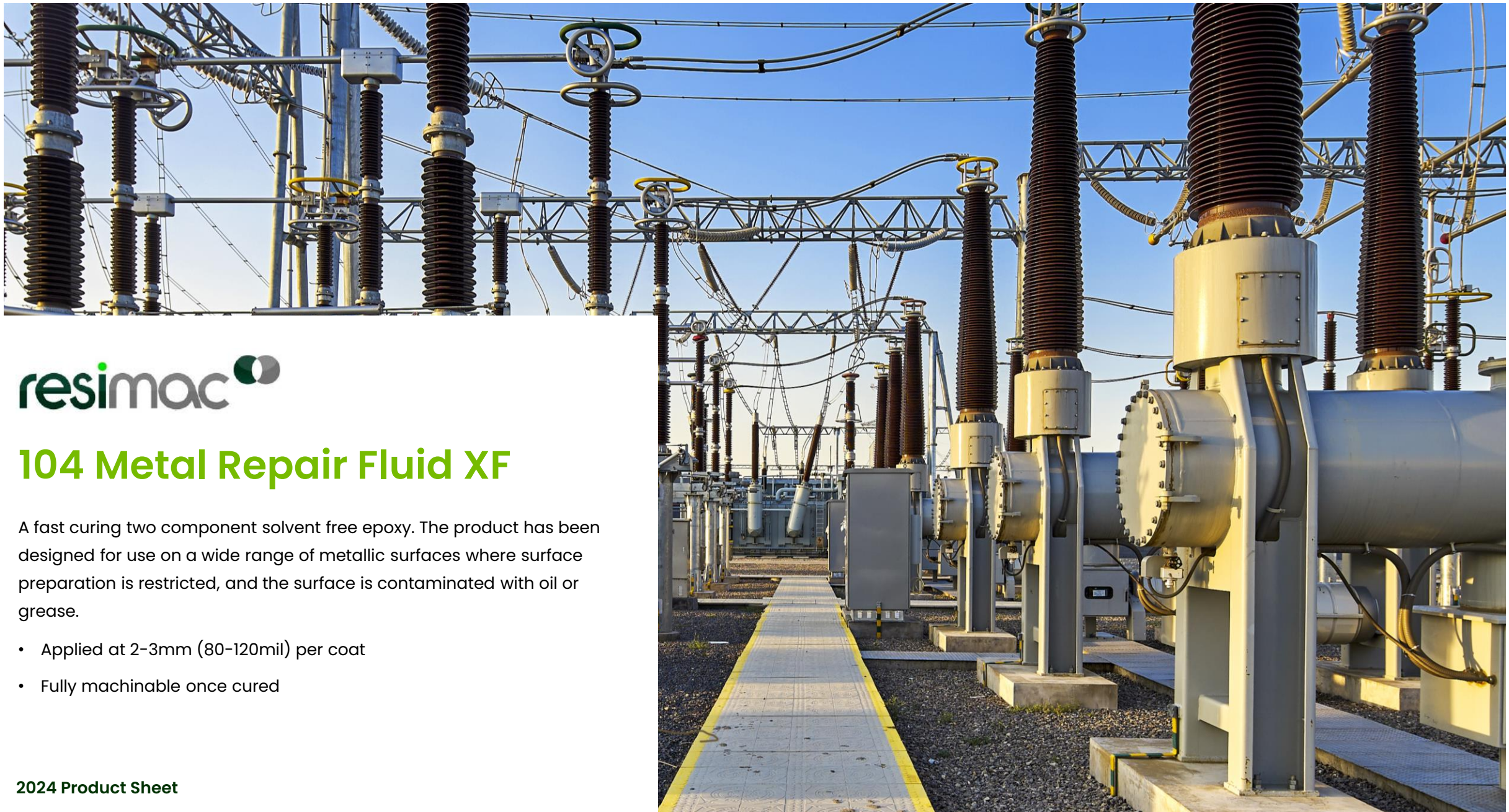




## 104 Metal Repair Fluid XF

A fast curing two component solvent free epoxy. The product has been designed for use on a wide range of metallic surfaces where surface preparation is restricted, and the surface is contaminated with oil or grease.

- Applied at 2-3mm (80-120mil) per coat
- Fully machinable once cured

# Typical Applications

A two component fast curing solvent free epoxy metal repair fluid. The product has been designed for use on a wide range of surfaces and is tolerant of less than ideal surface preparation and surfaces contaminated with grease, oil and lubricants.

Suitable for emergency repairs to worn surfaces, or anti-slip systems for metallic substrates. Resurfacing and sealing leaking transformers. The material can also be used as a gap filling adhesive.

- Repair and resurfacing of transformers where weeping or leaking oil is contaminating the repair surface
- Damaged flanges
- Leaking tank seams
- Pipe work

# Cure times

## Overview

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

## Useable Life

|            |          |
|------------|----------|
| 10°C/50°F  | 10 mins  |
| 20°C/68°F  | 5 mins   |
| 30°C/86°F  | 2.5 mins |
| 40°C/104°F | 75 secs  |

## Hard Dry

|            |         |
|------------|---------|
| 10°C/50°F  | 2 hours |
| 20°C/68°F  | 1 hour  |
| 30°C/86°F  | 30 mins |
| 40°C/104°F | 15 mins |

## Full Cure

|            |         |
|------------|---------|
| 10°C/50°F  | 8 hours |
| 20°C/68°F  | 4 hours |
| 30°C/86°F  | 2 hours |
| 40°C/104°F | 1 hour  |

# Characteristics

## Appearance

|           |                        |
|-----------|------------------------|
| Base      | Black viscous fluid    |
| Activator | White viscous fluid    |
| Mixed     | Mid grey viscous fluid |

## Solids Content

100%

## Volume Capacity

555cc/Kg

## Sag Resistance

Nil at 3mm

## 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:

0.111m² at 1mm                      1.2ft² at 40mil

800gm (1.76lb) fully mixed:

0.444m² at 1mm                      4.75ft² 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)  
800gm (1.76lb)

## 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 D785 85

### Heat Resistance

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

Resistant to dry heat up to 130°C (266°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      43°C (109°F)

100°C (212°F) Cure      61°C (142°F)

### Food Contact

USDA compliant for incidental food contact.

# Application Guide

## A. Surface Preparation

### Metallic Substrates – Hand tools

- 1 Wipe away any ponding oil or grease using a solvent wipe.
- 2 All surfaces must be cleaned using wire brush, metal file, coarse sandpaper etc.
- 3 Once abraded, the surface must be cleaned with solvent to ensure as much oil and grease is removed.

### Metallic Substrates – Mechanical tools

- 1 Wipe away any ponding oil or grease using a solvent wipe.
- 2 All surfaces must be mechanically abraded using handheld grinders to *ISO 8501/4 ST2 (SSPC SP3 ST2)*.
- 3 Once abraded, the surface must be cleaned with solvent to ensure as much oil and grease is removed.

## 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).

## 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.

## Overcoating Times

### Minimum

The applied material can be overcoated as soon as it is touch dry.

### Maximum

The overcoating time should not exceed 4 hours.

## Quick Application Guide



### Step 1

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



### Step 2

Take equal measures of base and activator material, clean the spatula between measures.



### Step 3

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



### Step 4

The material must be a Consistent light grey. Wipe away any unmixed material from the mixing surface.



### Step 5

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

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