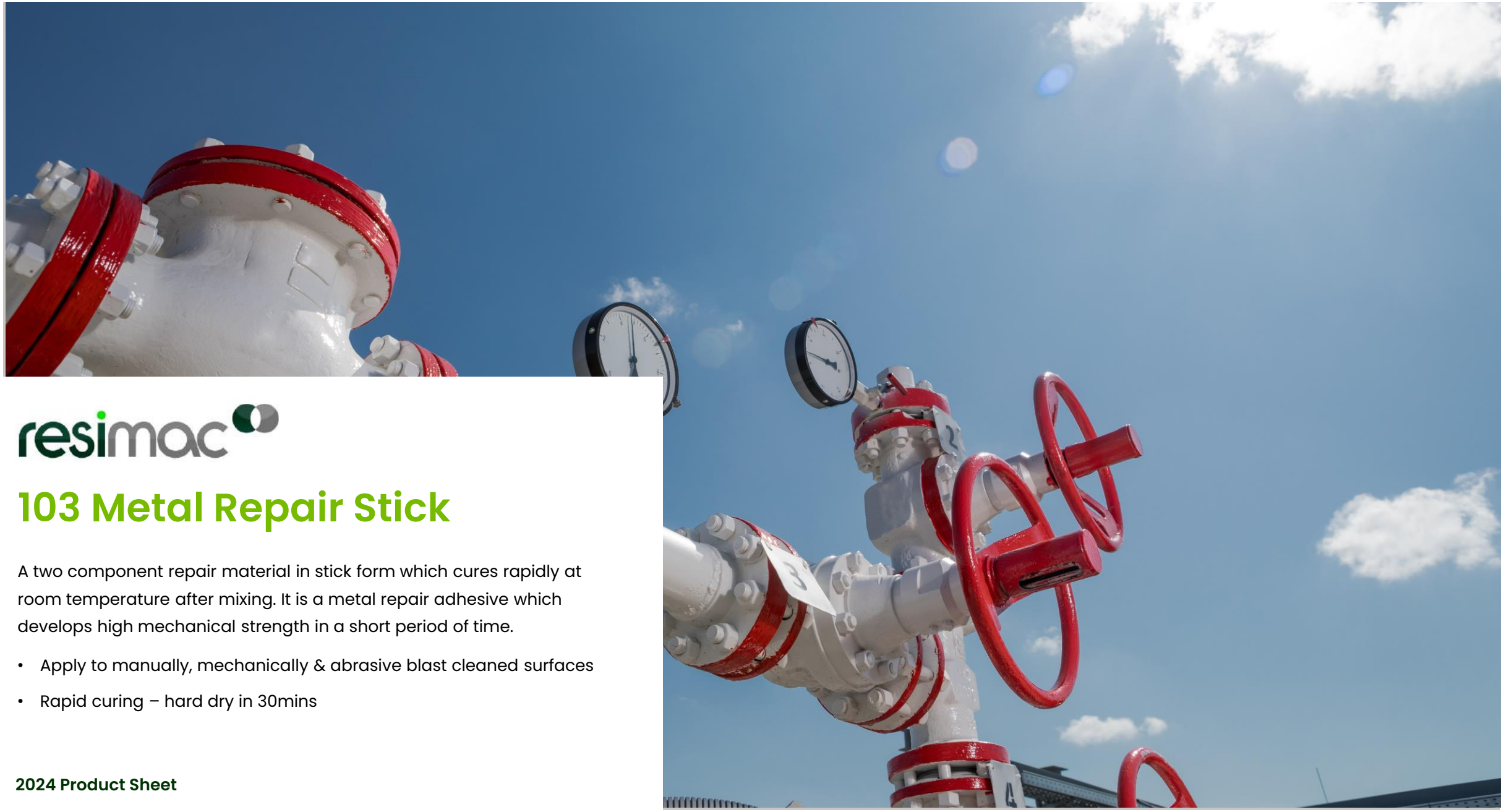


103 Metal Repair Stick

A two component repair material in stick form which cures rapidly at room temperature after mixing. It is a metal repair adhesive which develops high mechanical strength in a short period of time.

- Apply to manually, mechanically & abrasive blast cleaned surfaces
- Rapid curing – hard dry in 30mins

2024 Product Sheet

Typical Applications

103 Metal Repair Stick is a two component repair material in stick form which cures rapidly at room temperature after mixing. It is a metal repair adhesive which develops high mechanical strength in a short period of time.

- Cracked pump or valve casings
- Scored hydraulic rams
- Worn bearing housing
- Damaged flanges
- Leaking tank seams
- Cracked engine blocks
- Plugging leaking pipes

Characteristics

Appearance

Base	Dark grey putty
Activator	Black putty
Mixed	Mid grey putty

Density

Base	N/A
Activator	N/A
Mixed	N/A

Solids Content

100%

Mixing Ratio

Product supplied in stick form

Volume Capacity

55.5cc per 125gm stick

Storage Life

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

Sag Resistance

Nil at 25mm

Cure times

Usable Life		Min machining time		Max overcoating time		Full Cure	
10°C/50°F	10 mins	10°C/50°F	1 hour	10°C/50°F	N/A	10°C/50°F	2 hours
20°C/68°F	5 mins	20°C/68°F	30 mins	20°C/68°F	N/A	20°C/68°F	1 hour
30°C/86°F	2.5 mins	30°C/86°F	15 mins	30°C/86°F	N/A	30°C/86°F	30 mins
40°C/104°F	1.25 mins	40°C/104°F	7.5 mins	40°C/104°F	N/A	40°C/104°F	15 mins

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:
125gm

Mechanical Properties

Compressive Strength
Tested to ASTM D695
843kg/cm² (12,000psi)

Flexural Strength
Tested to ASTM D790
455kg/cm² (6470psi)

Hardness
Rockwell R to ASTM D785 92

Heat Resistance
Suitable for use in immersed conditions at temperatures up to 50°C (122°F).
Resistant to dry heat up to 150°C (302°F) dependent on load.

Adhesion
Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile 185 kg/cm² (2630 psi)

Pull off Adhesion to ASTM D4541 on mechanically prepared mild steel to ST2 surface cleanliness 125kg/ cm² (1780 psi)

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 to ISO 8501/4 ST2 (SSPC SP2).
3. Once abraded, the surface must be degreased and cleaned using MEK or similar type material.

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 material.
4. All surfaces must be coated before gingering or oxidation occurs.

B. Mixing & Application

Prior to mixing please ensure the following:

1. The ambient & surface temperature is above 5°C (41°F).
2. The product is supplied in stick form and therefore the base and activator component are premeasured.
3. Simply break off the required amount of material from the stick and using gloved hands knead the product until the black and grey components become a consistent mid grey.
4. The product once fully mixed has a usable life of 3-5mins at 20°C (68°F).
5. Once a consistent mix has been achieved apply the material by pressing the putty onto the prepared surface.

Overcoating Times

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

Maximum
The overcoating time should not exceed 1 hour.

PLEASE NOTE: Where the maximum overcoating time is exceeded, the material should be allowed to harden before being abraded or flash blasted to remove surface contamination, as this can cause a coarse profile.

Cure Times

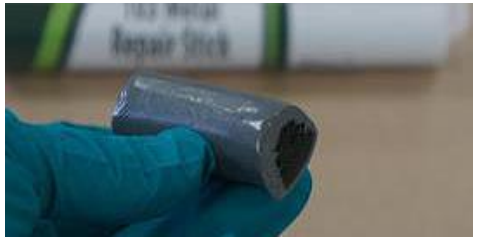
At 20°C (68F°) the applied materials should be allowed to harden for the times indicated below before being subjected to the conditions indicated. These times will be extended at lower temperatures and reduced at higher temperatures:

Usable Life	5 minutes
Machining and light loading	30 minutes
Full cure	1 hour

Quick Application Guide

Step 1

Remove the metal stick from The plastic tube.



Step 2

Cut off the required amount.

Step 3

Using a gloved hand mix the 2 components together.

Step 4

Once you have a consistent Mid grey colour, apply the Mixed product to the damaged 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 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 if the product is suitable 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: 1st June 2029.

Information & Enquiries

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