

resimac Ltd.

530 HA100

Single component, solvent free epoxy novolac designed for high temperature metal surfaces. Cures in service at 100–240°C (212–464°F) for long term corrosion protection.

- Cures at 100-240°C (212-464°F) with no shutdown required
- Solvent free and surface tolerant
- Excellent corrosion protection at elevated temperatures
- Single component, heat activated epoxy novolac

2025 Product Sheet

Typical Applications

530 HA100 is a heat activated, solvent free epoxy novolac coating formulated for use on steel surfaces operating between 100–240°C (212–464°F). This single component system is ideal for field joints, pipelines, and equipment where traditional coatings cannot cure under elevated process temperatures.

- Field joints
- External pipeline sections
- Hot process pipes
- Valves

- External tank and equipment surfaces
- Corrosion under insulation (CUI) zones

Characteristics

Appearance

Single Red thixotropic component

Solids Content

100%

Volume Capacity

714cc/kg

Sag Resistance

Nil at 250 microns 100°C (212°F) Nil at 150 microns 150°C (302°F) Nil at 100 microns 240°C (464°F)

Density

Mixed 1.40

Mixing Ratio

Single component

Storage Life

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

Coverage

4ltrs (1.1 US gallon) of product will give the following coverage rates

10m² at 400 microns 108ft² at 16mil

Cure times

Touch dry

| 100°C/212°F | 50 mins |
|-------------|---------|
| 150°C/302°F | 5 mins |
| 200°C/392°F | 3 mins |
| 240°C/464°F | 30 secs |

Max overcoating time

| 100°C/212°F | 4 hours |
|-------------|---------|
| 150°C/302°F | 2 hours |
| 200°C/392°F | 1 hour |
| 240°C/464°F | 30 mins |

Full cure

| 100°C/212°F | 12 hours |
|-------------|----------|
| 150°C/302°F | 6 hours |
| 200°C/392°F | 3 hours |
| 240°C/464°F | 90 mins |

The product will only cure when applied to surfaces 100°C (212°F) and above.

The material should be applied in two coats at 400 microns WFT per coat. At this WFT the coating will have a theoretical coverage rate of 2.5m² per litre per coat.

PLEASE NOTE:

At elevated temperatures, the maximum achievable application thickness is reduced.

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

Mechanical Properties

Intercoat Adhesion with Thermoplastics

Application of Polypropylene at 150°C (302°F)

Cross Hatch Adhesion - Pass

Compressive Strength

Tested to ASTM B117 Minimum 5000 hours

Cathodic Disbondment

Tested to ISO 21809-3 Annex F in 3% NaCl at 1500mV 23°C (73°F) for 28 days

Average 4 mm (pass)

Tested to ISO 21809-3 Annex F in 3% NaCl at 1500mV at 65°C (149°F) for 28 days Average 4 mm (pass)

Adhesion

Tensile Shear to ASTM D1002 abrasive blasted mild steel with 75 micron profile 197kg/cm² (2800 psi)

Pull off Adhesion to ASTM 4541-17 abrasive blasted mild steel with 75 micron profile Immersed in water at 4°C (39°F) for 120 hours, steel plate heated to 75°C (167°F), followed by dry exposure at 200°C (392°F) for 120 hours >21 MPa (3045 psi) Adhesive failure of adhesive

Hardness

Shore D to ASTM D2240

| 00°C (202°F) | 86 |
|---------------|----|
| 50°C (302°F) | 80 |
| 200°C (392°F) | 72 |

Heat Resistance

Suitable for use in immersed conditions at temperatures up to 60°C (140°F)
Resistant to dry heat up to 240°C (464°F) dependent on load

Flexural Strength

Tested to ASTM D790 518kg/cm² (7350psi)

Immersion Resistance

Tested by Eddy Current and
Ultrasonic techniques after coated
steel immersed in water at
4°C (39°F) for 120 hours with the
temperature of the steel at up to
75°C (167°F), followed by dry
exposure at 200°C (392°F) for
16.7 hours
No change in thickness of coating
or any disbondment

Details & Legal

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 this document.

Pack Sizes

This product is available in the following pack sizes:
4ltrs (1.1 US gallon)
20ltrs (5.2 US gallons)

Application Guide

A. Surface Preparation

Metallic Substrates: Abrasive blast cleaning

- 1 All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
- 2 All surfaces must be abrasive blasted to ISO 8501/4 Standard SA2.5 (SSPC SP10/NACE 2) minimum blast profile of 75 microns (3mil) using an angular abrasive.
- 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.

Metallic Substrates: Mechanical abrasion

- 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 ST3).
- 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.

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.

Metallic Substrates: Hydro-blasting

- All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
- 2 All surfaces must be hydro-blasted using clean water at 12,000 psi (850bar) to NACE 5 (SSPC SP13 WJ3-WJ1).
- 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.

PLEASE NOTE: Surfaces must be operating at 100-240°C (212-464°F)

B. Product Preparation

Single component (4ltrs/20ltrs):

- 1 Ensure the product is at a temperature between 30*40°C (86-104°F).
- 2 The ambient & surface temperatures are not less than 3°C (6°F) above the dew point.

Metallic Substrates: Cold surfaces

The coating can be applied to cold surfaces, however after application the coated surface must be heated to 100°C (464°F) and above for the coating to cure. Heat must be applied until the coating has cured hard, please see the cure times overleaf. If applying to cold surfaces the following procedures must be followed.

- All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
- 2 All surfaces must be mechanically abraded, hydro-blasted or abrasive blast cleaned to the appropriate standard.
- Once abraded, the surface must be degreased and cleaned using MEK or similar type material.
- All surfaces must be coated before gingering or oxidation occurs.

C. Application

Brush or roller applications:

- 1 Pour the material into a paint kettle or paint tray.
- Using a 50mm (2") wide synthetic brush, stripe coat all edges, joints, corners and equipment with the mixed material. The stripe coat must be approximately 100mm (4") wide, at 200-300microns (8-12mils) wet film thickness.
- 3 Once the stripe coat has cured sufficiently and is capable of being overcoated, apply the 1st coat of product to all surfaces at 400 microns (16mils) wet film thickness.
- 4 All surfaces must be coated before gingering or oxidation occurs.
- Once the 1st coat of material has cured sufficiently (this depends on the surface temperature, please cures times overleaf)
- 6 Apply a 2nd coat of material to all surfaces at 400 microns (16mils) wet film thickness.

Spray applications:

- Spray application should be carried out by airless spray using a 60:1 ratio pump with an attached hot water pump to heat the spray lines.
- The temperature around the spray lines should be kept around 45°C (115°F).
- 3 Spray pressure of 3500psi and a tip size of 19-23 thou should be used.
- 4 All surfaces must be coated before gingering or oxidation occurs.
- 5 Use as short a line as possible to maintain product temperature (maximum 8meters/26foot).
- Apply the 1st coat of product to all surfaces at 400 microns (20mils) wet film thickness.
- Once the 1st coat of material has cured sufficiently (this depends on the surface temperature, please see cures times below), apply a 2nd coat of material to all surfaces at 400 microns (20mils) wet film thickness.

Quick Application Guide

Spray applications:



Step 1

Ensure you have: 1 x 4ltr/20ltr unit 1 x spray equipment 1 x spatula



Step 2

Prior to application ensure the product is heated to 40-45°C (104-113°F) DO NOT OVERHEAT.



Step 3

Recommended spray set up:

- 60:1 minimum ratio pump
- 19-23 Thou tip
- 3500+ psi spray pressure
- Pre-heat the product to 40-45°C (104-113°F)



Step 4

Apply the coating to the prepared surface at a minimum wet film thickness of 400 micron (16mil).



Step 5

Dependent on the surface temperature, apply a 2nd coat of material at 400 microns WFT as soon as the 1st coat has cured sufficiently hard enough.

Quick Application Guide

Brush & roller applications:



Step 1

Ensure you have:
1 x 4ltr/20ltr unit
1 x spatula
1 x paint brush
1 x roller

1 x paint container



Step 2

Prior to application ensure the product is heated to 40-45°C (104-113°F) DO NOT OVERHEAT.



Step 3

All surfaces must be mechanically abraded, then degreased and cleaned using MEK or similar type material.



Step 4

Apply the coating to the prepared surface at a minimum wet film thickness of 400 micron (16mil).



Step 5

Dependent on the surface temperature, apply a 2nd coat of material at 400 microns WFT.

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: 1st June 2029.

Information & Enquiries

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