

RESIMETAL 301 Epoxy Resin and Hardener

Resimac 301 Epoxy Resin and Hardener

is a two component thixotropic solvent free epoxy material used for injection applications, bonding of dissimilar materials and for use in conjunction with a range of tapes and fabrics to produce high strength composite repairs. The product can be applied to manually prepared surfaces and is ideal for encapsulating problem pipework ranging from 1"-36" diameter, once cured the system can resist up to 300psi pressure. For injection applications the material can be pumped into voids up to 15mm in depth.

Typical applications

Suitable for encapsulating long lengths of large diameter pipework when used in conjunction with Resimac technical fabrics. Bonding dissimilar materials such as wood, plastic and metals. Injection into voids and cracks ranging from 1mm to 20mm.

Characteristics

Appearance

Base:	White thixotropic liquid
Activator:	Amber thixotropic liquid
Mixed:	White thixotropic liquid

Mixing Ratio

By weight:	2:1
By volume:	2:1

Density

Base:	1.15
Activator:	1.15
Mixed:	1.15

Volume Capacity

869cc/Kg
260cc/300gm

Solids content

100%

Sag Resistance

Nil at 3mm

Useable Life

10°C	50 minutes
20°C	25 minutes
30°C	12.5 minutes

Coverage

Application should be carried out in a single coat. To achieve the correct film thickness of 1mm per coat a practical coverage rate of 0.7 sq m/kg should be aimed for.

Cure Times

At 20°C 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:

Movement without load or immersion	2 hours
Light loading	8 hours
Full loading	16hours
Immersion	5 days

Storage life

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

Mechanical Properties

Adhesion

Tensile Shear to ASTM D1002 on abrasive blasted mild steel with 75 micron profile

148kg/cm² (2100psi)

Compressive strength

Tested to ASTM D 695

1034kg/cm² (14,700psi)

Corrosion Resistance

Tested to ASTM B117

Minimum 5000 hours

Flexural Strength

Tested to ASTM D790

912kg/cm² (13,000psi)

Hardness

Rockwell R to ASTM ASTM D785

85

Heat Distortion

Tested to ASTM D648 at 264psi fibre stress.

20°C Cure 70°C

Heat Resistance

Suitable for use in immersed conditions at temperatures up to 70°C. Resistant to dry heat up to 150°C dependant on load.

Chemical Resistance

The product resists attack by a wide variety of low concentration inorganic acids, alkalis, salts and organic media. Refer to the Resimac Technical Centre for advice.

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.

Health and 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 the detailed Material Safety Data Sheet

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