

RESIMETAL 301 Epoxy Resin & Hardener – solvent free epoxy gel for injection applications and pipe wrapping

Resimetal 301 Epoxy Resin & Hardener is a two component solvent free epoxy gel 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.

- Apply to mechanically & abrasive blast cleaned surfaces
- Ideal for gap filling and injection applications
- Ideal for large diameter pipe wrapping

Typical Applications

Injection applications

Gap filling

Bonding dissimilar materials

Pipe wrapping

Surface Preparation

Injection Applications

Bonding of dissimilar materials

Encapsulation using technical fabrics

1. Where possible all surfaces must be abrasive blast cleaned to ISO 8501/4 Standard SA2.5 (SSPC SP10/ NACE 2) and with a minimum blast profile of 3mils using an angular abrasive.
2. However this product is tolerant of less than ideal surface preparation and will adhere to surfaces prepared using Hand tools, Mechanical Tools and Hydro-blasting.
3. Where there is corrosion pitting, this should be rebuilt using Resimac 302 Epoxy Repair Cement which can also be used to enhance adhesion onto poorly prepared surfaces.

***PLEASE BE AWARE THAT FOR THE BEST RESULTS THE REPAIR SURFACE SHOULD BE ABRASIVE BLAST CLEANED. IF USING INFERIOR PREPARATION TECHNIQUES THIS WILL AFFECT THE PERFORMANCE OF THE PRODUCT.**

Mixing

Prior to mixing please ensure the following:

1. The base component is at a temperature between 60-77°F.
2. The ambient & surface temperature is above 41°F.

Once these 2 checks have been met, please proceed with mixing the product.

1. Transfer the contents of the Activator unit into the Base container.
2. Using the spatula provided (300-450gm (.66-1lb) units) or an electric paddle mixer (6kg (13.23lbs) unit), mix the 2 components until a uniform material free of any streaks is achieved.
3. From the commencement of mixing the whole of the material should be used within 25 minutes at 68°F.

Application

Injection Applications - dispense the product into a one component cartridge up to 0.25 US gallon. Using a single component injection pump, air fed, the material can be injected into gaps to bond dissimilar materials.

Bonding dissimilar materials – the mixed material can be used to bond a wide range of material including, concrete, plastic and metal. Apply the product using a brush or applicator tool at a wet film thickness range of 40 – 160mil.

Encapsulation using technical fabrics – the mixed product can be used in conjunction with glass tape, glass cloth, chop strand matting and linen scrim. The use of a technical fabric is dependent on the type of repair to be performed. Typically the following repairs are performed with these materials –

3 layer pipe wrapping	<ol style="list-style-type: none"> 1. Apply 301 Epoxy Resin and Hardener at 40mil WFT Wrap 50/100mm glass tape around pipe with a 50% overlap 2. Apply 301 Epoxy Resin and Hardener at 20mil WFT Wrap 50/100mm glass tape around pipe with a 50% overlap 3. Repeat step 2, and finish with a 20mil coat of 301 Epoxy Resin
3 layer pipe t-joint	<ol style="list-style-type: none"> 1. Apply 301 Epoxy Resin and Hardener at 40mil WFT Cut the glass tape in to strips and lay over the surface where the 2 pipes meet Ensure there are at least 3 layers of 301 Resin and Glass tape around the joint area 2. Once all the t-Joint area has been coated apply 301 Epoxy Resin at 40mil WFT to all the repair area wrap 50/100mm glass tape around pipe with a 50% overlap 3. Repeat step 2, and finish with a 20mil coat of 301 Epoxy Resin

Coverage Rates

300gm (0.66lb) of fully mixed product will give the following coverage rates –
5.3ft² at 20mil
2.7ft² 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.

Cure Times

At 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	25 minutes
Touch Dry	2 hours
Hard dry	24 hours
Full cure	3 days

Pack Sizes

This product is available in the following pack sizes –
300gm (0.66lb), 450gm (0.99lb) 6kg (13.2lb)

Color

Mixed material – Opaque
Base component – White gel
Activator component – Light yellow gel

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 8 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 (60-86°F)

Other Technical Documents

Quick Application Guide	-	Hand application
Safety Data Sheets	-	Base & Activator components
Product Specification Sheet	-	Technical Performance Information

Health and Safety

Please ensure good practice is observed at all times. Protective gloves, goggles & a disposable coverall must be worn during the mixing and application of this product. Before mixing and applying the material ensure you have read the fully detailed 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 if the product is suitable for use. Resimac accepts no liability arising out of the use of this information or the product described herein.



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