



DEP 301 RH221

DEP 301 RH221 is a two to one mixing ratio formulated resin and hardener composition for use in conjunction with a range of tapes and fabrics to produce high strength composite repairs. When used with either glass tape, glass matt, chop strand matt or linen scrim it can be used for repairs to equipment such as leaking pipework up to 36" and 300 psi, holed pump casings, leaking flange faces, leaking tank seams, leaking valve casings.

Surface Preparation

All oil and grease must be removed from the surface of the repair using an appropriate cleaner such as MEK.

For optimum performance, the surface should be abrasive blasted to Swedish Standard SA2.5 and a minimum blast profile of 75 microns using an angular abrasive. Once blast cleaned, the surface must be degreased and cleaned using MEK and all prepared surfaces must be repaired before rusting or oxidation occur.

NOTE: For salt contaminated surfaces the area must be repeatedly water washed, preferably by power washing, until ingrained salts no longer come to the surface on drying. The surface should then be abrasive blast cleaned as above prior to cleaning and degreasing with MEK.

Where abrasive blast cleaning is not possible the surface should be roughened by bristle blaster, needle gun or grinding. Under these conditions adhesion levels will not be optimal although still satisfactory for most applications.

Where the product should not adhere, a thin layer of a suitable release agent should be applied taking care not to contaminate other areas.

Where there is corrosion pitting, this should be rebuilt using DEP ERC121 which can also be used to enhance adhesion onto poorly prepared surfaces.

On surfaces already rebuilt with DEP 302 ERC121 no further surface preparation is required where over-coating takes place within 24 hours. After this maximum over-coating time has elapsed roughen the surface by flash blasting or other means of abrasion.

Mixing and Application

Warm the Base to 15-25°C before mixing and do not apply when the ambient or substrate temperature is less than 10°C or less than 3°C above the dew point.

Transfer the Activator component into the Base tin and mix the two components together until they are streak free. Apply the mixed material to the prepared surface using a short bristled brush or applicator tool. The material is thixotropic and can be applied up to 1000 microns without sagging. As a guide, when using with reinforcement the first layer is applied at 1000microns and subsequent layers at 500microns.

PLEASE NOTE: For more information on using DEP 301 RH221 in conjunction with either glass tape, glass matt, chop strand matt or linen scrim, please refer to the DEP marine or industrial repair kit manuals.

From the commencement of mixing, all of the material must be used within 25 minutes at 20°C. For mixing small quantities the mixing ratio is 2 parts of Base to 1 part of Activator by weight or volume.



Technical Data Sheet

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:

Usable life	25 minutes
Movement without load or immersion	2 hours
Light loading	16 hours
Full loading	5 days

For Optimum Performance

After an initial curing period of at least 16 hours at 20°C, raising the cure temperature progressively to 60 - 100°C for up to 8 hours will result in improved mechanical, thermal and chemical resistance properties.

Storage Life

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

Technical data and Performance

Volume Capacity	869cc/Kg
Compressive Strength ASTM D695	1034kg/cm ² (14,700psi)
Tensile Shear Adhesion ASTM D1002	148kg/cm ² (2100psi)
Flexural Strength ASTM D790	912kg/cm ² (13,000psi)

Health and Safety

Please ensure good practice is observed at all times during the mixing and application of this product. Protective gloves must be worn during the mixing and application of this product. Before mixing and applying the material please ensure you have read the fully detailed Material Safety Data Sheet.

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 the products suitability for use. DE Polymers Limited accepts no liability arising out of the use of this information or the product described herein.

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