

## Technical Data Sheet

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### Product Name: RELINFORCE Fab S

Two Component epoxy resin system for impregnation & bonding

### Description

*RELINFORCE Fab S* is a two component liquid epoxy system for saturating glass or carbon fabric to make in-situ fiber reinforced polymer composite. *RELINFORCE Fab S* provides an excellent balance of viscosity & pot life resulting in excellent flow properties and fiber wetting while enhancing the toughness of the cured system.

### Applications

- Structural Adhesive with high wettability, suitable for bonding tapes and fabrics of carbon and glass
- Suitable for application on vertical or overhead
- Use with tapes and fabrics with even high aerial weight.

### Features & Benefits

- Composition with improved mechanical characteristics
- Designed specifically for the RELINFORCE Fabric Range
- High Mechanical Properties
- High Adhesion to different surfaces: concrete, masonry, metal, wood, stone
- Low Viscosity and convenient for impregnating tapes and fabrics with high areal weight manually
- Does not require a primer
- Solvent free

### Mechanical Properties

Compressive Strength @ 25 <sup>o</sup> C (As per ASTM C 579-01) 7 Days	> 50 MPa
Tensile Strength @ 25 <sup>o</sup> C (As per ASTM D638) 7 Days	> 40 MPa
Flexural Strength @ 25 <sup>o</sup> C (As per ASTM D790) 7 Days	> 60 MPa
Bond Strength @ 25 <sup>o</sup> C	> 1.5 MPa (Concrete Failure) > 8 MPa ( Steel Failure)

Vadodara Composites Division, Village: Asoj, Vadodara-Halol Expressway, Taluka: Waghodia, Vadodara, Gujarat 391510

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### Component Details & Physical Property

	Base	Hardener	Mixed
Feel	Liquid	Liquid	Liquid
Color	Light	Dark Yellow	Dark Yellow
Mixing Ratio, By Weight	100	50	
Density @ 25 °C	1.1 – 1.2	0.95-1.05	1.05 – 1.15
Viscosity @ 25 °C , cps	4000 - 10000	500-1000	
*Pot Life @ 25° C			10 - 15 mins for ~ 5 Kg mix 30 - 60 mins for 100 g mix
*Waiting Time for fabric-application with chemical adhesion			+10°C: 2 - 3 hrs. +20°C: 1 - 2 hrs. +30°C: 30 - 60 mins
Application Thickness			2 - 3mm
Yield (Pack)	5 kg	2.5 kg	7.5 kg

Note: \* Ambient Temperature will affect the Pot life & Waiting Time of the Product & is inversely related Since it is fast curing product, it is advisable to mix small quantities required for applications.

### Mixing Procedure

- Mechanical Mixing using low speed stirrer is suggested.
- Mixing till uniform color achieved of the mixed material.

### Application Procedure

- Surface to be clean of Oil, Grease, dust, curing compound, mould release agent & any other material which will affect the adhesion of system to substrate.
- Appropriate Methodology to be adopted to achieve sound substrate for application of *RELINFORCE Fab S*
- In case of concrete, smaller loose portion to be removed & faired with *RELINFORCE EP Putty*
- Application to ensure all pinholes & surface undulation is covered with *RELINFORCE EP Putty* before application of *RELINFORCE Fab S*
- Substrate Residual Moisture to be less than 4%. Not to be applied on substrate with rising dampness.
- Apply with a roller or trowel on the surface to be strengthened, properly prepared and not wet. For fabrics impregnation is recommended to use saturator. Apply the reinforcement tape or fabric, taking care to arrange the fibers taut and wrinkle free while protect hands with waterproof gloves. Roll the surface with spiked rollers ensuring the proper impregnation. Install a second resin layer to complete saturation and incorporation of the reinforcement. Repeat several times stratification as defined in the project. Do not exceed recommended maximum thickness

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provided for this product. Any overlap must be carried out on partially hardened system within the times reported in this TDS to ensure chemical bond between the two layers. Where it's necessary to adhere to the cured reinforcement system with plaster or other building systems, add dusting granulated quartz (0.7-1.2mm) to the system surface when is not completely hardened.

### Packaging Size

- Part A: 5 kg
- Part B: 2.5 kg

### Shelf Life

- Base: 24 Months
- Hardener: 24 Months

### Storage Condition

- Material to be stored in cool dry place
- To be kept in shade with no direct sunlight

### Health & Safety Hazard Condition

Please refer to MSDS for detailed information on the health & safety hazard while using the product.

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