

## Technical Data Sheet

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### Product Name: RELinforce Surface Shield I

Ambient quick cure protective coating for metal and concrete.

### Description

Two component solvent free protective coating for primer as well as top coat, can be applied alone or with filler, low viscosity product designed for proper sealing of cracks in concrete and metal. The product is designed to resist variety of chemicals including sulfuric and phosphoric acid.

### Application Areas

- Chemical resistant lining of tanks
- Protective coating for concrete and metal in corrosive environment

### Features & Benefits

- Low viscosity assists in proper crack filling
- Good penetration in hairline cracks
- Solvent Free
- Fast curing and strength buildup
- Superior mechanical & chemical resistance

### Component Details & Physical Property

	Resin	Catalyst	Mixed
Feel	Liquid	Liquid	Liquid
Color	Colorless to pale yellow	Brown	Colorless to Yellow
Mixing Ratio	100	3	
Gelation time			<1 minutes @ 25°C
Viscosity	< 20 cP @ 30°C	> 50 cP @ 25°C	
*Setting Time			2-3 minutes @ 25°C
Application Thickness			< 3mm
Change in Volume			No Shrinkage Observed
Yield (Pack)	200 kg	6 Kg	206 Kg

Note: \* Ambient Temperature will affect the Pot life & Setting Time of the Product & is inversely related.

### Mixing Procedure

**Without Filler:** Take 100 grams of resin in the resin pot of a spray machine, use the setting of catalyst equivalent to 3 parts of accelerator and spray the same on the substrate.

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**With Filler:** Take 40 grams filler in 100 grams of resin, mix well to get proper consistency and then load the same in a spray machine, use the setting of catalyst equivalent to 2.1 parts of accelerator and spray the same on the substrate.

\* Please note Resin and catalyst to be mixed in external spray nozzle only (internal mixer won't work for such fast gelling resin)

### Application Procedure

- For using unfilled coating, mixing to take place instantaneously in the Spray machine
- For filled formulation, take the resin in a separate pot, add filler with constant stirring and ensure proper miscibility, then load the same in Spray machine.

### Surface Preparation

- Surface to be clean of Oil, Grease, dust & any other material which will affect the adhesion.
- Appropriate Methodology to be adopted to achieve sound substrate for application of product.
- Substrate Residual Moisture to be less than 4%. Not to be applied on substrate with rising dampness.
- Spray the mix material with over the substrate to achieve required thickness.
- Application to ensure all pinholes & surface undulation is covered.

### Mechanical Properties of Cast sheet

Tensile strength ASTM D638	Tensile modulus ASTM D638	Flexural strength ASTM D790	Flexural modulus ASTM D790	Impact strength ASTM D256
> 15 MPa	> 3 GPa	> 40 MPa	> 0.5 GPa	> 10 kJ/m <sup>2</sup>

### Packaging Size

- Resin: 200 Kg
- Catalyst: 6 Kg

### Shelf Life

- Resin: 12 Months
- Catalyst: 12 Months

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### 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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