## Talrakfibwrap SE

#### High build epoxy saturant



#### Description

Talrakfibwrap SE is a high build epoxy saturant. It is used to apply over the primer in carbon/glass fibre composite system to provide bonding between the wraps and the mineral substrate. The system includes Talrakfibwrap Primer, Talrakfibwrap SE and Talrakfibwrap CF/GF wraps.

#### **Features & Benefits**

- > Thick consistency, suitable for horizontal, vertical and overhead applications
- > High adhesive strength
- Fast cure
- > Can be applied on reasonably dry surfaces
- > Specified range of temperature applications

#### **Primary Application**

Talrakfibwrap SE is used to bond Talrakfibwrap CF/GF wraps to the concrete substrate. The saturant provides a shear load path between the concrete substrate and the FRP reinforcing system. It is also used to bond together multiple layers of FRP wraps Talrakfibwrap CF/GF. The typical application is to bond Talrakfibwrap CF/GF to concrete substrates such as columns for axial load enhancement and beams for shear strengthening.

| ColourPale yellow to amberConsistencyThick consistencyDensity1.25 – 1.26 g/ccPot life2 hours at 30°C |                         |                      |
|------------------------------------------------------------------------------------------------------|-------------------------|----------------------|
| Density 1.25 – 1.26 g/cc                                                                             | Colour                  | Pale yellow to amber |
|                                                                                                      | Consistency             | Thick consistency    |
| Pot life 2 hours at 30°C                                                                             | Density                 | 1.25 – 1.26 g/cc     |
|                                                                                                      | Pot life                | 2 hours at 30°C      |
| Application temperature+15°C to +40°C                                                                | Application temperature | +15°C to +40°C       |
| Full cure time7 days at 30°C                                                                         | Full cure time          | 7 days at 30°C       |
| Wet film thickness 250 microns                                                                       | Wet film thickness      | 250 microns          |
| Dry film thickness 250 microns                                                                       | Dry film thickness      | 250 microns          |
| Glass transition $\sim 80^{\circ}$ C temperature (T <sub>g</sub> )                                   |                         | ~ 80°C               |

#### **Technical Properties**

#### **Application Instructions**

#### **Surface Preparation**

The surface must be clean, sound and free from bond breaking materials such as grease, wax, laitance, dust, deep depressions, cracks and ridges. Use suitable methods such as wire brushing, vacuuming, grinding, milling, shot blasting and water jetting to prepare the substrate dependent on its condition. Any damaged mineral surfaces shall be repaired to sound condition with Talrakresimix EP (Refer product TDS for more details).

#### Mixing

The base and hardener shall be emptied into a suitable container and mixed with a paddle and slow speed heavy duty drill, ensuring the sides are scraped down. A uniform colour should be obtained after mixing thoroughly. The mixing will generally take 3 minutes.

#### Application

- Talrakfibwrap CF/GF wrap shall be cut to the desired size before starting the application.
- Priming An epoxy resin based solvent free sealer cum primer - Talrakfibwrap Primer is applied over the prepared and clean surface using a brush and allowed for drying for about 24 hours before application of saturant.
- Base layer of saturant Apply a dedicated epoxy saturant for bonding of the prepared wraps to the substrate -Talrakfibwrap SE over the tack free primer to achieve a minimum wet film thickness of 250 microns.
- Place Talrakfibwrap CF/GF on the base layer of saturant firmly without entrapping air into it and pressed /rolled with a suitable roller to hold in position till the excessive saturant is pushed out from the sides of the wrap and remove the excess material with a spatula or a straight edge.
- Top layer of saturant Apply Talrakfibwrap SE on the installed wraps to achieve a minimum wet film thickness of 250 microns. Ensure that the base layer of saturant is not affected during the application of top layer of saturant.
- > The saturant shall be allowed to cure for 7 days prior to installing further renders or coatings.
- The saturant should not be left exposed. It is recommended to protect it with plastering or from polyurethane top coat - Talrakote PU for better UV resistance.

NOTE: The cured material applied on the concrete substrate shall not be exposed to temperatures more than  $T_g$ -30°C, incase it should be exposed to such temperatures a suitable thermal insulation layer shall be provided.

### Talrakfibwrap SE

#### Estimating Packaging

Talrakfibwrap SE is supplied in 4 litre combo pack.

#### Coverage

Theoretical coverage is 4m<sup>2</sup>/ltr @250 microns WFT. However, the coverage will depend upon the substrate condition and thickness of the material used.

#### Storage

Talrakfibwrap SE has a shelf-life of 12 months if kept in dry store in original, unopened containers. If stored at high temperature and/or high humidity conditions the shelf life may be reduced.

#### Precautions Health & Safety Instructions

Some people are sensitive to epoxy resin systems and may develop dermatitis on skin contact. Rubber gloves, barrier creams, protective clothing, goggles and respirator shall be worn while handling the materials. Sufficient mechanical and/or local exhaust ventilation shall be provided to maintain easy working conditions. If contact with skin or eyes occurs, washing with plenty of water is suggested. SOLVENT SHALL NOT BE USED. If irritation persists, seek immediate medical advice. Smoking and naked flame should be avoided while using the material.

Flash point - 33°C.



# Тасган

Talrak Construction Chemicals Pvt. Ltd.

An ISO 9001:2015 Certified Company

Works:

Plot No. 115-A, 1st Phase. Harohalli Industrial Area, Kanakapura Taluka - 562 112. Ramanagar Dist. www.talrak.in

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