

TECHNICAL DATA SHEET

RCF Saturant-Adhesive Epoxy | Revision Date 2/23/2023

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1. DESCRIPTION

RCF Saturant-Adhesive Epoxy is a two-component, 100% solid epoxy structural adhesive designed for the impregnation of carbon, aramid and glass fiber textiles.

2. WHERE TO USE

RCF Saturant-Adhesive Epoxy can be used to saturate and adhere CFRP to concrete and masonry.

3. ADVANTAGES

- Low viscosity – easy to mix and apply
- Can be used without a primer
- Excellent impregnation and combination of the textile
- High strength
- Very good adhesion to concrete, masonry, stonework, steel & aluminum
- Moisture tolerant and blocks moisture once cured

4. SHELF LIFE / STORAGE

24 month shelf life from date of manufacture and stored at 40°F-95°F (4°C-35°C).

5. TECHNICAL DATA

RCF Saturant-Adhesive Epoxy Technical Data	
Storage Conditions:	40°F – 95°F (5°C – 35°C).
Condition material to:	65°F – 85°F (18°C – 29°C) before using.
Mix Ratio	1:1 by volume
Mixture Viscosity (cps, 4#/20/25)	3500 ± 250
Gel Time (min, 60 g @ RT)	25.0 ± 2.0
Tack Free Time (73°F or 23°C)	3 to 5 hours
Tensile Properties (ASTM D638), 7 day cure	
Tensile Strength:	2,800 psi (19.3 MPa)
Tensile Elongation:	40%
Slant Shear Bond Strength (ASTM C882)	
2 day cure:	1,400 psi
14 day cure:	2,500 psi
Compressive Properties (ASTM D695), 7 day cure	
Compressive Strength:	8,000 psi
Compressive Modulus:	220,000 psi
Compressive Strength (ASTM C579)	
3 hour cure:	1,500 psi (10.3 MPa)
24 hour cure:	5,000 psi (34.5 MPa)
Bond Strength (ASTM C1583/ACI 503R)	400 psi (substrate failure)
Bond Strength (ASTM C882)	2 day cure: >250 psi (substrate failure)
Hardness (Shore D)	76-80D (7 days)
Flexural Strength (ASTM D790)	7,500 psi
Shrinkage on Cure (ASTM D2566)	0.2%
Thermal Compatibility (ASTM C884)	Pass
Heat Deflection Temperature (ASTM D648)	120°F (49°C)
Water Absorption (ASTM D570)	0.2% (24 hr)
Chloride Ion Permeability (AASHTO T277)	0.0 coulomb
Colour	Clear, slight yellow

*NOTE: Epoxy cure is affected by temperature. Low temperatures will increase cure time, higher temperatures with decrease cure time. The displayed properties are typical characteristics not to be considered as specifications.

6. APPLICATION TEMPERATURE

Substrate and ambient air temperature between 47°F and 95°F (8°C and 35°C)

7. CONDITION PRODUCT

Condition cartridge and contents to a temperature of 65°F to 85°F (18°C to 29°C) for easier dispensing.

8. MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS

For complete installation instructions on various applications using RCF Saturant-Adhesive Epoxy visit www.rhinocarbonfiber.com or call Rhino Products for more information at 1-888-684-3889.

9. SURFACE PREPARATION

Refer to Rhino Carbon Fiber Application Instructions.

10. CLEAN UP

Clean tools and equipment. Do not allow epoxy to harden on equipment as cured material can only be removed mechanically.

11. SAFETY

Please refer to the SDS for RCF Saturant-Adhesive Epoxy published on our Website, www.rhinocarbonfiber.com or call Rhino Products for more information at 1-888-684-3889. This TDS sheet is not intended to list all Safety and Health Requirements necessary for the installation of these products. All Health and Safety Requirements required by OSHA shall be followed.

12. ADDITIONAL INFORMATION

Minimum age of concrete must be 28 days from date of placement depending on curing and drying conditions. When the temperature is higher than 30°C the working time is shorter.

13. WARRANTY

Rhino Products warrants to the Buyer that this product is in good quality and conforms to the manufacturer's specifications in force on the date of manufacture and when used in accordance with the Installation Instructions and when stored as directed in the technical literature.

Manufacturer cannot warrant or guarantee any particular method of use, performance or application under any particular condition and Buyer is responsible for determining the suitability of intended purpose and assumes all risks therein. RCF shall not be liable for any injury, loss, cost of labor or consequential damages either directly, indirectly or incidentally, arising out of the use or misuse of any product sold by RCF or another distributor. If the product is proven to be in non-conformance, the Buyers sole remedy shall be a refund of the purchase price or replacement of product.