

TITAN® SATURANT

100% SOLID EPOXY SYSTEM

Description Titan®-Saturant is a two-part, 100% solid, epoxy system designed for composite laminate repair in conjunction with Titan®, NRI's infrastructure repair system. It can be used alone, as an anti-corrosion coating, or as a saturant for NRI's fiberglass system.

Typical Applications

- Flare lines, blow down lines, chemical processing lines, firewater lines
- Girth welds, elbows, tees
- CUJ
- High temperature environments

Benefits

- High temperature rating with an ambient-cured epoxy
- No heating or post-curing required for typical applications
- Compatible with a wide range of chemicals as per NRI's Chemical Compatibility Chart, latest revision.

Coverage 320 SqFt per gallon @ 5 mils
160 SqFt per gallon @ 10 mils

Thickness Primer: 5-10 mils
Saturant: as determined by NRI engineering calculations

Mixing & Mix Ratio Power mix Part A, then combine with Part B and power mix. Do not mix partial kits. Resin to hardener 5:1 by volume.

Pot Life 75 minutes @ 75°F (24°C), less at higher temperatures

Limitations

- Application temperature shall be a minimum of 50°F (10°C) and maximum of 150°F (66°C)
- Relative humidity must be 85% or below
- Pipe surface must be 5°F (-15°C) above dew point

Related Products The following products are compatible with Titan-Saturant:

- Titan Primer Epoxy
- Titan Top Coat (if required)

Properties	Property	Typical Test Value
	Mix Ratio	5:1
	Lap Shear Adhesion Strength to Steel 0.030" (0.76mm) bondline	1,268 psi (8.74 MPa)
	Lap Shear - 1,000hr Hot-Wet Immersion 194°F (90°C)	837 psi (5.77 MPa)
	Lap Shear - 1,000hr Hot-Dry Immersion 320°F (160°C)	670 psi (4.62 MPa)
	Glass Transition Temp (Tg)	367°F (186°C)

Design The Titan system was designed to conform to ACI 400.8-13, AC125, and ICC-E5. Consult NRI Engineering for specified use.

Surface Preparation Surface preparation shall be in accordance with ACI 546R, ICRI No. 310.1R-2008 and ACI 562-13 detail methods for the repair and surface preparation of concrete.



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Cure Schedule	Temperature	Working Time	Cure to Set
	50°F (10°C)	3.75 hours	24 hours
	60°F (16°C)	2.5 hours	12 hours
	75°F (24°C)	1.25 hours	6 hours
	90°F (32°C)	35 minutes	3 hours
	150°F (66°C)	10 minutes	1 hour
	200°F (93°C)	5 minutes	30 minutes
	280°F (138°C)	30 seconds	1 minute

Measure Shore D hardness to confirm full set has been achieved before returning line to service.

Cleanup and Safety For proper information regarding the safe handling, storage, and disposal of chemical products, users shall refer to the most recent SDS, latest revision, containing physical, ecological, toxicological, and other safety-related data.

Shelf Life 12 months

Storage Conditions Store in original, unopened containers, indoors at a max temp of 95°F (35°C).

Packaging

- Supplied in kits ranging from pints to gallons for the following coverages: 20ft² (1.8m²), 40ft² (3.7m²), 80ft² (7.4m²), 160ft² (14.8m²)
- Typically ships in 17" x 15" x 14" boxes (43cm x 38cm x 36cm)

Warranty ©Neptune Research Inc. (NRI) NRI® is a registered trademark, while Titan®-118™, and Titan-Saturant® Epoxy are registered trademarks of NRI. NRI utilizes a process of continuous product improvement for all of our products. While we do strictly adhere to our products' specifications, we routinely implement product improvements. Therefore, please contact your local NRI distributor or office for the most current product specifications. NRI warrants the quality of this product when used according to directions. Titan 118 is not an approved coating system. Failing to coat per standard procedures can to atmospheric corrosion damage. Apply protective coatings per company standards. User shall determine suitability of product for use and assumes all risk. The seller will not accept liability for more than product replacement.

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