

# THERMO-POXY™ INSPECTABLE

## ANTI-CORROSION PRIMER & SATURANT

FOR USE WITH THERMO-WRAP™ INSPECTABLE SYSTEM

**Description** Thermo-Poxy™ Inspectable is a two-part epoxy compound designed for applications at elevated temperatures. It can be used alone, as an anti-corrosion coating, or as a saturant for NRI's fiberglass system. Thermo-Poxy was designed for high temperature repair applications while still curing in ambient temperature conditions. When fully cured, the material produces a durable, resilient bond that is resistant to many chemicals and adverse environments.

**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 280°F (138°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 Thermo-Poxy Inspectable:

- Filler: Thermo-Fill™HT
- Composite Systems: Thermo-Wrap™ Inspectable
- UV Protection, if necessary: Syntho-Coat™

Thermo-Poxy Primer & Saturant Properties	Property	Typical Test Value
	Viscosity 75°F (24°C)	~90,000 cps
	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 Thermo-Wrap system was designed to conform to, and is recognized by ASME PCC-2, ASME B31, ISO TS24817, DOT, API, and CSA Z662 standards for nonmetallic reinforcing solutions. Consult NRI Engineering for specified use.

**Surface Preparation** Surface preparation and profiling shall promote continuous contact between the FRP system and pipe by providing a clean, smooth, and circumferential surface. Surface preparation shall be in accordance with SSPC-SP1 "Solvent Cleaning" and SSPC-SP11 "Power Tool Cleaning" with a 1-3 mil surface roughness (25-76 microns) minimum. NRI's composite repair systems are bond-critical and require a strong adhesive bond between the clean pipe and the composite system for maximum effectiveness.



# THERMO-POXY™ INSPECTABLE

## ANTI-CORROSION PRIMER & SATURANT

FOR USE WITH THERMO-WRAP™ INSPECTABLE SYSTEM

**Installation** Installation of Thermo-Poxy shall be performed by NRI qualified applicators only. Surface preparation, mixing of epoxy, and installation of the system are to be in accordance with NRI's Thermo-Wrap Installation Guide, latest revision. Quality control inspection during and after installation of the Thermo-Wrap system shall be performed per NRI's Installation Validation Procedure: Quality Control Records, latest revision.

Cure Schedule	Temperature	Working Time	Set Time
	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: 20ft<sup>2</sup> (1.8m<sup>2</sup>), 40ft<sup>2</sup> (3.7m<sup>2</sup>), 80ft<sup>2</sup> (7.4m<sup>2</sup>), 160ft<sup>2</sup> (14.8m<sup>2</sup>)
  - 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 Thermo-Wrap™, Thermo-Wrap™Inspectable, Thermo-Wrap™CF, Thermo-Fill™HT, Thermo-Poxy™ and Syntho-Coat™ are 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. 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.

**THERMO-POXY™ INSPECTABLE**  
**ANTI-CORROSION PRIMER & SATURANT**  
 FOR USE WITH THERMO-WRAP™ INSPECTABLE SYSTEM