

SYNTHO-POXY™ HC

TWO-PART EPOXY COMPOUND FILLER

Description Syntho-Poxy™ HC is a two-part epoxy filler that effectively transfers the load to the repair system over surface irregularities including pits, voids, corrosion defects, dents, etc.

Typical Applications

- Any metal surface defect containing pits, voids, corrosion, etc.
- Used with Syntho-Glass® XT, Thermo-Wrap™ CF and Viper-Skin™ repair systems
- In immersion or, below- and above-grade

Benefits

- Effectively transfers load from the pipe to the repair system
- High bond strength reduces possibility of leaking under the repair
- Available in cartridge form for uniform mixing and consistent applications

Coverage By volume

Thickness Use as required to fill pits and anomalies

Mixing & Mix Ratio 1:1 by weight and volume; Mix at 75°F (24°C) or above for best results

Pot Life 4-6 minutes at 75°F (24°C)

Limitations

- Epoxy application temperature: minimum of 40°F (5°C) and maximum of 200°F (93°C)
- Maximum allowable sustained humidity must be less than 90%

Related Products

- Syntho-Subsea™ LV
- Syntho-Glass®
- Syntho-Glass® XT
- Viper-Skin™
- Thermo-Wrap™ CF

Material Properties	Test	Method	Result
	Compression Strength	ASTM D695	8,000 psi (552 bar)
	Lap Shear	ASTM D3163	2,000 psi (138 bar)

Design NRI's engineered composite repair systems were designed to conform to, and are recognized by ASME PCC-2, ASME B31, ISO TS24817, DOT, API, and CSA Z662 standards for non-metallic reinforcing solutions. Consult NRI Engineering for specified use.

Surface Preparation Surface preparation and profiling shall promote continuous intimate 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 (microns) minimum. NRI's composite repair systems are bond-critical and require a strong adhesive bond between the clean pipe and the composite system.

Installation Installation of NRI's engineered composite systems shall be performed by NRI qualified applicators only. Surface preparation, mixing of epoxy, material saturation, and installation of the systems shall be in accordance with NRI's product specific installation guides, latest revision. Quality control inspection during and after installation of the system shall be performed per NRI's Installation Validation Procedure: Quality Control Records, latest revision.

Application Tools An application gun is required for the use of 50ml, 200ml, and 400ml cartridges.

Item #	Description
EPOXY-APPGUNM50	Syntho-Poxy HC 50ml Applicator Gun
EPOXY-APPGUNM200	Syntho-Poxy HC 200ml Applicator Gun
EPOXY-APPGUNM400	Syntho-Poxy HC 400ml Applicator Gun



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Cure Schedule	Temperature	Working Time	Set Time
	50°F (10°C)	8 minutes	3 hours
	60°F (16°C)	4 minutes	2 hours
	75°F (24°C)	2 minutes	1 hour
	90°F (32°C)	30 seconds	30 minutes

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 indoors in cool, dry, ventilated storage at temperatures below 95°F (35°C) in original, unopened containers. Minimum storage temperature 60°F (15.5°C)

Color Resin: white
Curing agent: black

Packaging	Item #	Description
	SPHC050ML	Syntho-Poxy HC 50ml Cartridge w/ Nozzle
	SPHC200ML	Syntho-Poxy HC 200ml Cartridge w/ Nozzle
	SPHC400ML	Syntho-Poxy HC 400ml Cartridge w/ Nozzle
	SPHCHP	Syntho-Poxy 1/2 Pint Kit
	SPHCPT	Syntho-Poxy 1 Pint Kit
	SPHCQT	Syntho-Poxy 1 Quart Kit

Typically ships in 17" x 15" x 14" boxes (43cm x 38cm x 36cm)

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