

# SYNTHO-GLASS®

## FIBERGLASS WATER-ACTIVATED COMPOSITE SOLUTION



### Description

Syntho-Glass® is the originally, patented fiberglass pre-impregnated composite that is activated by salt or freshwater. Packaged in a hermetically sealed foil pouch, it is ready to use and does not require any measuring or mixing. This system, when used with the appropriate primary patch, enables you to repair and reinforce virtually any diameter pipe in minutes. Syntho-Glass not only restores a pipe to its original psi rating, but actually can make the repair area stronger than the original pipe, reducing downtime, saving in parts and labor. With an initial setting time of only 30 minutes (75°F/24°C), Syntho-Glass is excellent on copper, steel, SS, PVC, FRP, clay, concrete, rubber, and more. It is safe to use, nontoxic, noncombustible, and odorless. Syntho-Glass is a versatile solution for industries where quick-action repair can be critical.

### Mechanical Properties

Test	Method	Result
Tensile Strength	ASTM D638	36,000 psi (2482.1 bar)
Lap Shear Strength	ASTM D5379	900 psi (62.05 bar)
Flexural Strength	ASTM D790	26,100 psi (1799.53 bar)
Dielectric Strength	ASTM D149	16,000 Volts
Impact Resistance	ASTM G14/G62	123 ft. lb (167J)

### Typical Applications

- Emergency repair
- Cracked or corroded pipes
- Irregular pipe fittings
- Force mains and gravity lines
- Underwater repair and splash zone
- Joint and tee repair

### Benefits

- Ready to use
- Effective, time-saving
- No mixing and no mess
- Sets rock hard in minutes

### Physical Properties

VOCs: None

Working Time: 5 Minutes at 75°F (24°C)

Initial Cure Time: 30 Minutes at 75°F (24°C)

Resin Type: Water-activated polyurethane

Resin Application:

Pre-impregnated

Service Temperature:

-50° to 250°F (-45° to 121°C)

Application Temperature:

32° to 150°F (-18° to 65°C)

Shelf Life: 24 Months

Item #	Roll Size
SG520	2" x 5' (5.08cm x 1.524m)
SG930	3" x 9' (7.62cm x 2.743m)
SG415	4" x 15' (10.16cm x 4.572m)
SG430	4" x 30' (10.16cm x 9.144m)
SG450	4" x 50' (10.16cm x 15.24m)
SG620	6" x 20' (15.24cm x 6.096m)
SG630	6" x 30' (15.24cm x 9.144m)
SG650	6" x 50' (15.24cm x 15.24m)
SG830	8" x 30' (20.32cm x 9.144m)
SG850	8" x 50' (20.32cm x 15.24m)

**NRI**  
Innovative Composite Solutions



### Chemical Resistance ASTM D 543, Test period 2 months at 73°F (23°C)

Solution Tested	Product Result
Sulfuric Acid 50%	No Effect
Hydrochloric Acid 50%	No Effect
Sodium Hydroxide Solution 20%	No Effect
Gasoline	No Effect
Toluene	No Effect
Xylene	No Effect
Mineral Spirits	No Effect
Distilled Water	No Effect
SG850	No Effect

### Temperature vs. Time

Average Temperature	Approx Work Time	Return to Service Time
95°F (35°C)	3 min.	23 min.
70°F (21°C)	8 min.	28 min.
60°F (16°C)	10 min.	1 hr. 25 min.
50°F (10°C)	14 min.	2 hrs. 42 min.
42°F (6°C)	17 min.	3 hrs. 2 min.
35°F (2°C)	20 min.	6 hrs. 21 min.



©Neptune Research Inc. (NRI). Syntho-Glass® is a registered trademark 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. Syntho-Glass is NOT an approved coating system. Failing to coat per standard procedures can lead 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. SG DS 0111

**NRI**  
Innovative Composite Solutions