



Designed Solutions.

Ultra-Build Epoxy Lining System

RECOMMENDED SERVICE

For industrial and aqueous service where strength and corrosion resistance are most critical.

RECOMMENDED USAGE

- Waste Collection Systems
- Sewers
- Lift Stations
- Waste Treatment Facilities
- Cooling Water Lines
- Slurry Tanks
- Vaults
- Manhole Rehabilitation

WHAT IS SLS-30™?

SLS-30™ is a two component, 100% solids epoxy system. It has been designed to provide the greatest structural strength and chemical resistance of any product in its class.

WHY USE SLS-30™?

SLS-30™ provides both a structural, cured in place lining and a chemical protective barrier in one quick application. It can be applied to both old and new bricks, concrete or steel at a thickness of 40 mils. to over 275 mils. Using Citadel Technologies' multi-component application system, a two-man crew can line 500 sq. ft. to 1000 sq.ft. per hour at 100 mils greatly reducing standard application costs.

APPLICATION

SLS-30™ can be applied at all ambient temperatures ranges; however, care must be taken not to apply over frost or active leaks. It must also be noted that when applied to very cold surfaces, set and cure times will be greatly increased. As with any cured in-place system that requires a good bond, the substrate must be free from all dirt, oil, grease, and rust.

ENGINEERING DATA

	Metric System	English System
Mix Ratio (Resin/Hardner)	2.5:1*	2.5:1*
Combined Wt. Per Gallon	9.6 lbs / gal.	9.6lbs / gal.
Pot. Life (100 g mass)	12 min @ 25°C	12 min @ 77°F
Set Time	3.0 hrs @ 2.54 mm @ 25°C	3.0 hrs @ 100 mils @ 77°F
Hardness	78-84 (Shore D)	78-84 (Shore D)
Compressive Strength	93,079.2 kpa	13,500 psi
Compressive Str. Ult.	151,685 kpa	22,000 psi
Tensile Strength	59,294.9 kpa	8,600 psi
Tensile Elongation, % (resin)	>3.5	>3.5
Tensile Modulus	3,240.54 mpa	470 ksi
Flexural Strength	97,505 kpa	142,00 psi
Flexural Modulus	3,447.38 mpa	500 ksi

** available in 2:1 and 3:1 ratios*

CHEMICAL RESISTANCE

	(Percent Weight Gain 112 days)
Sulfuric Acid, 20%	1.402%
Sodium Hydroxide, 5%	0.91%
Ammonium Hydroxide, 5%	0.995%
Nitric Acid, 1%	1.301%
Ferric Chloride, 1%	1.227%
Sodium Hypochlorite, 1%	1.100%
Distilled Water	1.015%
Toluene	1.205%





TESTING

SCHEDULE OF TEST METHODS

TEST PERFORMED	METHOD/STANDARD USE
Tensile Strength / Elongation	ASTM D638
Flexural Strength	ASTM D790
Hardness, Shore	D ASTM D2260
Solids by Volume (%)	ASTM D2369
Weight per Gallon	ASTM D1475
Flash Point TOC	ASTM D1310
Dry Time	ASTM D1650
Chemical Resistance (30 Days)	ASTM D543
Chemical Resistance Flexural Strength (180 Days)	ASTM D790
Compressive Strength	ASTM D695
Freeze-Thaw	UL 76-63
Adhesion	ASTM D3983

COMPOSITE TEST DATA ON SLS-30™ ULTRABUILD EPOXY LINING

PHYSICAL DATA	METRIC SYSTEM	ENGLISH SYSTEM
Pot Life (100 g mass)	11 min 5 sec @ 25 °C	11 min 5 sec @ 77 °F
Set Time	2 hrs 47 min @ 2.54 mm @ 25°C	2 hrs 47 min @100 mls @ 77°F
Hardness	78-84 (Shore D)	78-84 (Shore D)
Compressive Strength	91,654.1 kpa	13,292 psi
Tensile Strength	59,949.9 kpa	8,695 psi
Tensile Modulus	3,240.54 mpa	470 ksi
Flexural Strength	102,684 kpa	14,893 psi
Flexural Modulus	3,447.38 mpa	500 ksi

CHEMICAL RESISTANCE	PERCENT WEIGHT GAIN (112 DAYS)
Sulfuric Acid, 20%	1.402%
Sodium Hydroxide, 5%	0.91%
Ammonium Hydroxide, 5%	0.995%
Nitric Acid, 1%	1.301%
Ferric Chloride, 1%	1.227%
Sodium Hypochlorite, 1%	1.100%
Distilled Water	1.015%
Toluene	1.205%