



NOVA-Sil™

Plural Component Applied System

100 % solids Polysiloxane-Novolac Epoxy High Performance Tank Lining

PRODUCT DESCRIPTION

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Nova-Sil™ is a high performance two component Polysiloxane epoxy. Uniquely formulated to provide the resistance of epoxies allied with the unique qualities of polysiloxanes; durability, chemical and UV resistance. **Nova-Sil™** is highly abrasion and impact resistant while maintaining its solvent, acid, and caustic resistance without blistering, or peeling. **Nova-Sil™** is formulated as a DTM; however, it is compatible with inorganic zinc, or organic zinc rich primers.

APPLICATIONS:

- **Bio Reactor tanks**
- **Gray & Black water tanks**
- Pipe coating / lining
- Chemical tank linings
- Hopper railcar linings
- Abrasion / impact resistant applications
- Water/ waste water tanks/plants
- Cement /concrete floor coatings

FEATURES & BENEFITS

- 100 % solids/ Low **VOC**
- DTM capable technology
- Chemical and solvent resistant
- Excellent abrasion & impact properties
- Hot water/steam resistant
- Highly cost effective
- Available in a variety of colors
- Airless, roller or brush application
- Thin film or high build capabilities

TECHNICAL DATA

TYPE: Polysiloxane Epoxy
 COLOR: Factory tinted
 GLOSS: Semi gloss
 SOLIDS: 100 % by volume (calculated)
 WEIGHT: 13.32 lbs. per gallon
 FLASH POINT: > 212° F (100° C)
 VOC CONTENT: **0 lb per gallon as supplied**

REDUCTION SOLVENT: Consult Technical service

CLEAN UP SOLVENTS: EEP, MEK, ISOBUTYL Acetate

TYPE OF CURE: Chemical reaction

MIX RATIO: 1 part resin to 1 part cure
By Volume

POT LIFE: 85 °F/29 ° C: 18 min.
70 °F/21 ° C: 30 min.

DRY TIMES: (@ 75° F (24° C) 50% R.H.)

TOUCH: 1 hrs.

THROUGH: 8 hrs.

RECOAT: 6 hours.

IMMERSION

SERVICE: @ 75°F/24°C: 4

TEMPERATURE RESISTANCE:

	°F	°C
Continuous	<450	<232 (Dry)
Intermittent	<500	<260 (Dry)
Aqueous	>212	>100 (Immersion)

For shorter dry times consult your sales representative

PERFORMANCE DATA

Salt fog resistance	ASTM B 117	2000 hrs.
Impact strength, in../lbs.	ASTM D 4226	60 +
Hardness, shore D	ASTM D 2240	70 +
Elongation % @ break	ASTM D 522	22%
Adhesion	ASTM D 4541	>1200 psi
Abrasion resistance (cs 17 wheel, 1000 gr. Load, 1000 cycles)	ASTM D 4060	<28 mg loss

COVERAGE

Theoretical: @ 1.0 mil dry = 1528 sq.ft./gal
Recommended DFT 10 – 25 (250 – 625 microns)
Coverage: @ 10 mils: 153 square feet per gallon
@ 25 mils: 61 square feet per gallon

SURFACE PREPARATION

Steel: Any and all sharp edged metal should be contoured. Weld flux and residual splatter removed. Oils and greases shall be removed with solvents in accordance to (SSPC) SP - 1. Surfaces should be free from salt contaminants. Abrasive blast per SSPC- SP10 to provide a minimum anchor pattern of 1.5 – 2.5 mils. Measurement of surface profile shall be obtained with replica tape or profile comparators.

Galvanized steel or aluminum: Remove oil & grease with a neutral detergent or commercially available pre solution such as Galvaprep® ,Devprep 88® or equal.

APPLICATION METHODS

This material requires the use of a plural component spray system. Utilizing a Jiffy type mixer, mix each component separately. Clean the mixer thoroughly between parts A & part B. The **Nova-Sil** may be applied by brush for striping or repairing in hard to reach areas only. For optimum appearance and even application spraying is the preferred method. Utilization of a 63:1 ratio plural component pump such as a Graco hydra - cat or other manufacturer's equipment with tip sizes between are .019" - .035".

For DTM: All welds should be stripe painted by brush or spray prior to general application. For general application; a coat shall be (12 - 14 wet mils). Two coats may be applied for a maximum mil thickness of 24 – 28 mils. For a non skid horizontal surface apply a first coat of **Nova - Sil™** at (5 – 6 wet mils) followed by broadcasting dry sand, aluminum oxide, pumice or stainless steel shavings as aggregate into the first coat. Within 5 minutes. Follow immediately with the second coat of 10 – 20 mils

Temperature restriction: To utilize **Nova-Sil™** as supplied, the ambient and surface temperature must be a minimum of 60° F (15° C) and below 110° F (43° C). The surface temperature must be a minimum of 5° F (3° C) above the dewpoint.

SAFETY PRECAUTIONS & CLEANUP

This material is intended for use by professional applicators. Keep out of reach of children. Proper industrial hygiene procedures consistent with OSHA regulations must be utilized. Always use protective goggles, gloves, respiratory equipment and appropriate clothing. Refer to material safety data sheet for full details.

Cleanup: solvents such as Epoxy Thinner, MEK, EEP and methylene chloride.

AVAILABILITY AND SHIPPING INFORMATION

Packaging:	Two gallon unit: (1 gallons resin) / (1gallons cure) Five gallon unit: (2.5 gallons resin)/ (2.5 gallons cure)	Weight:	26.64 lbsTotal
Resin freight Classification:	Class 55	Hardener freight classification:	UN 2079, Hazard class 8, Corrosive