

**General Information**

Description NSF 61/600 potable water tank lining; Single leg airless applied 70% solids ceramic epoxy. TL-70 may be used as a liner for steel or concrete water tanks and may also be specified for immersion service in treatment plant services such as clarifiers or aeration basins.

Generic Type Aliphatic Amine Epoxy

AWWA D102 ICS-3, ICS-5

Available Colors Blue, Tan and White, all colors share a common part B

**Available Kit Sizes**

A	4 gallons
B	1 gallon
Total Kit Volume	5 gallon kit

NSF 61/600 For use with tanks greater than or equal to 20,000 gallons, not exceeding a surface area to volume ratio of 3.5 cm²/L. Minimum Re-coat/Final Cure Time/temp prior to water immersion: 7 days at 70 deg F, up to 30 mils DFT, up to 10% thinning with K-1034. UL rated for pipes.

Performance Testing

ASTM D4541 Adhesion to Carbon Steel	900 psi, cohesive failure
ASTM D4541 Adhesion to Ceramaprime primer	1460 psi, cohesive failure
ASTM D4541 Adhesion to Indurazinc MC-67 primer	1100 psi, adhesive failure
NACE TM0174 Water Immersion	5 years no effect
ASTM D2794 Impact	120 in·lbs direct
ASTM D2243 Freeze Thaw Cycling	10 cycles, no effect

Compatible Primers Ceramaprime, Ceramaprime LV, Ceramaprime CC, Indurazinc MC-67, PE-70, *direct to metal, direct to concrete*

Surface Preparation All substrates clean and dry, free of dirt, oils, greases and contaminants

Carbon Steel	Abrasive blast to SSPC SP-10 with a 1-3 mil profile
Concrete	Abrasive blast as per SSPC SP-13 to an ICRI CSP 3 or greater. Can be applied over Mortarchem & EFS 707
Repairs, small areas	SSPC SP-11 power tool to bare metal to produce an angular profile

Shelf Life & Storage 2 year shelf life parts A and B, Store long term between 35 and 90°F, Recommend heating material to 80-85°F in the 24 hours prior to application

Application Information

Film Thickness

	minimum	maximum
wet film	10 mils	36 mils
dry film	7 mils	25 mils

Coverage Rate

1122 ft²/gal at 1 mil
45 ft²/gal at 25 mils

Application Instructions

Single Leg Airless Spray	Remove all filters from spray system, use pump capable of 2,000 psi line pressure; 0.027-0.031 spray tip. Pre-heat material from 90-110°F prior to mixing and application. Graco Viscon in-line heater recommended
Plural Airless Spray	Remove all filters from spray system, use Graco XP-70 or equivalent heated plural spray unit with heated hose bundle and in-line static mixer. 0.027-0.031 spray tip. Heat A and B components to between 85 and 105°F and spray at minimum line pressure to achieve fan
Brush and Roll	Recommended for small areas, and stripe coating only

Mix-Ratio 4:1 by volume A:B

Pot Life

50°F	75°F	90°F
5 hours	3 hours	90 mins

Thinning Conditions

Attempt to heat material first, Up to 10% with K-1034 if necessary

All steel temperatures must be ≥50°F above the dewpoint, ambient temperatures ≥50°F

	minimum	maximum
Substrate temperature	50°F	140 °F
Material temperature	90°F	120°F
Humidity	0% RH	95% RH

Cure

	50°F	75°F	90°F
dry to handle	36 hrs	18 hrs	9 hrs
dry to topcoat	12 hrs	12 hrs	12 hrs
cured for water immersion	14 days	5 days	5 days
cured for NSF 600 service	Heat to 70°F	7 days	7 days

Reference

Physical Properties

HAPS	0.005 lbs/gal
VOC	250 g/L
volume solids	70 ± 2%
weight solids	87 ± 2%

Links

[Safety Data Sheet](#)
[Mortarchem Tech Data](#)
[Ceramaprime Tech Data](#)
[Induron Water Tank Coatings Page](#)
[UL NSF-61/600 Listing for TL-70](#)