

INDURON

PROTECTIVE COATINGS

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TECHNICAL DATA

TL70 CERAMIC EPOXY



WATER QUALITY

NSF/ANSI 61 Drinking Water
System Components 26KM

Maximum Surface Area/Volume Ratio: 13.5 sq. cm²/L
Water Contact Temperature: 23°C

COATING DATA

DESCRIPTION:

TL70 Ceramic Epoxy is based on proprietary technology with an unparalleled 35-year track record. It is a two-component, high build, high solids, densely cross-linked, ceramic modified epoxy. It is a unique and outstanding extremely low permeability barrier coating formulated for the protection of steel and concrete immersed in potable water and many other environments. TL 70 meets the requirements of AWWA D102-17 ICS-1, ICS-2, ICS-6 and Complies with U. S. EPA Ozone Transport Commission (OTC) for Volatile Organic Compounds for VOC Emission Standards and COMAR for industrial maintenance coatings. This product has been certified for cold end use by the Water Quality Association to meet the requirements of NSF/ANSI International Standard 61 for potable water immersion service in tanks 20,000 gallons and greater capacity. TL70 Ceramic Epoxy is NSF approved up to 30 mils DFT, applied in 1 or 2 coats.

LIMITATIONS:

Do not use for immersion service above 120°F (49°C) or dry heat above 200°F (93°C). Not recommended for immersion in concentrated solutions of mineral acids, organic acids or sewage service.

SURFACE PREPARATION:

Steel (Immersion) - SSPC-SP 10/NACE 2 Near-White Metal Blast Cleaning using an angular, granular blasting media to achieve a minimum 1.5-2.0 mil surface profile. This product does not require abrading its surface prior to being recoated with itself, if recoated within 30 days. Prior to recoating, remove all surface contaminants. **Steel (Non-Immersion)**—SSPC-SP 6/NACE 3 Commercial Blast Cleaning. **Concrete** - New concrete must cure for at least 28 days. Verify dryness by testing for moisture per “ASTM D4263 Plastic Sheet Method”. Substrate must be clean, dry, sound and free of all curing compounds, oils, greases or any other contaminants. All concrete surfaces shall be made free of voids, cracks and other imperfections using Induron EFS 707 Epoxy Surfacer or Induron Mortarchem. Prepare the surface per ICRI 310.2 to achieve surface profile to meet a CSP 3-4. **Ductile Iron** – Contact coating manufacturer.

COATING SYSTEMS:

NSF/ANSI Standard 61 approved potable water immersion primers:

AquaClean, PE-70 Epoxy, RC-70 Epoxy, TL-70 Ceramic Epoxy, Indurazinc MC67

Approved potable water immersion topcoats:

AquaClean, PE-70 Epoxy, RC-70 Epoxy, TL-70 Ceramic Epoxy, and PermaClean 100 Ceramic Epoxy.

Non-potable water and water borne chemical immersion primers:

AquaClean, E-Bond 100, PE-70 Epoxy, RC-70 Epoxy, TL-70 Ceramic Epoxy, Perma-Clean II Primer, Indurazinc MC67.

Non-potable water and water born chemical immersion topcoats:

AquaClean, PE-70 Epoxy, RC-70 Epoxy, TL-70 Ceramic Epoxy, Perma-Clean II Epoxy, Ruff Stuff 2100 Coal Tar Epoxy, Ceramapure PL-90, PermaSafe 100 Ceramic Epoxy

Non-immersion primers: AquaClean, E-Bond 100, PE-70 Epoxy, RC-70 Epoxy, TL-70 Ceramic Epoxy, Perma-Clean II Primer, Induramastic 85, Indurazinc MC67.

Non-Immersion topcoats: AquaClean, PE-70 Epoxy, RC-70 Epoxy, TL-70 Ceramic Epoxy, Perma-Clean II Epoxy, Aquanaut Enamel, Indurethane 6600 Plus, Permastic Polyurethane, Perma-Gloss Fluorourethane.

COVERAGE:

Theoretical— 1,123 ft.² per gallon at 1.0 mil dry film thickness.

DRY FILM THICKNESS:

7.0 - 25.0 mils per coat. Multiple coats may be used if desired.

WET FILM THICKNESS:

10.0 – 36.0 mils

APPLICATION DATA**BLEND RATIO:**

One-part TL70 Ceramic Epoxy Activator to four parts TL70 Ceramic Epoxy Base by volume. Power agitate until components are thoroughly mixed.

POTLIFE:

90 minutes @90F, 3 hours @70F, 5 hours @50F.

APPLICATION:

Airless Spray—Use .027-0.31 tip; 45:1 pump ratio @ 80-100 psi (3,600-4,500 psi) operating air pressure. Remove all material filters from the pump. **Roll**— Use lambswool or high-grade professional roller cover. Additional coats may be required to achieve desired film thickness. **Brush** - Use natural bristle or high-grade professional brush. Additional coats may be required to achieve desired film thickness.

THINNING:

Not normally required. If necessary, may be thinned up to 10% with K-1034. Clean equipment with K-1034 Reducer.

CLIMATE:

Use this product only if the substrate temperature and ambient air temperature is above 40°F and is expected not to decrease for at least two hours after application. Also, the substrate temperature must be 5°F above the dew point for a period of at least two hours after application to avoid condensation occurring on wet paint. *** For cold weather application consult an Induron Representative.

DRY TIME:

TO HANDLE—9 hours @90F, 18 hours @70F, 36 hours @50F.

TO RECOAT—50°F or higher, 12 hours; 40°F-50°F, overnight.

POTABLE IMMERSION SERVICE—50°F or higher, 7 days with proper ventilation;

40°F-50°F, 14 days with proper ventilation.

Note: High film thickness, low temperature and/or poor ventilation will retard dry time.

PHYSICAL DATA:

VOLUME SOLIDS: 70% ± 2%

WEIGHT PER GALLON: 10.95 ± .2 lbs. per gallon (mixed)

VOLATILE ORGANIC CONTENTS:

Mixed unthinned < 2.1 lbs./gallon; < 250 grams/liter

Mixed thinned < 2.5 lbs./gal; < 302 grams/liter

HAZARDOUS AIR POLLUTANTS (HAPS)

Mixed unthinned 0.21 lbs./gallon solids; 25.2 grams/liter solids

COLOR: Pool Blue & Tan

SAFETY DATA:

See individual product label for safety and health data information. Individual Material Safety Data Sheets are available upon request.