

357 Phenolic Epoxy Tank Lining

Updated: January 2015

Specification Data

Generic Type: Phenolic modified amine epoxy

Description: APCO 357 is a high solids, high build, two component amine epoxy lining. When applied over properly prepared surfaces it exhibits excellent adhesion and corrosion resistance. 357 is self priming and an excellent choice for steel or concrete structures where chemical and temperature resistance is required. Formulated with inert pigments and industry leading resins and curing agents, 357 is specifically engineered for immersion protection in produced water tanks, hot crude oil tanks and process vessels.

Features:

- Excellent adhesion properties
- Very Good chemical and abrasion resistance
- Temperature resistant

Solids Content: 85% by Volume

Theoretical Coverage:

- 1363 mil ft²
- 227 ft² @ 6 Mils

Allow for loss during mixing & application.

VOC Value:

- 1.12 lbs/gal per EPA Method 24

Color: 1062 White, 1028 Gray, 3033 Green

Substrate & Surface Preparation

Must be clean and dry. Any dirt, dust, oil, contaminants, loose rust or loose mil scale must be removed.

Immersion Carbon Steel: Minimum SSPC-SP10/NACE No 2 Near white. Surface profile 2.0-3.0 mil.

Non-Immersion Carbon Steel: Minimum SSPC-SP3 Power tool Cleaning. For optimum performance SSPC- SP6 Commercial Blast, surface profile 2.0-3.0 Mil.

Previously painted surfaces: Surface must be sufficiently roughened, either by abrasive blasting or mechanical abrasion. Surface must attain a minimum 3B rating in accordance with ASTM D3359 "X-Scribe" test. Apply a test patch to check compatibility, prior to primary application.

Concrete: Concrete must be cured 28 days at 75°F minimum. Prepare surface in accordance with ASTM D4258 surface cleaning of concrete. Maximum performance achieved when surface is abraded in accordance with ASTM D4259

Primer: Self priming

Application Equipment

Spray Application:

- **Conventional:** Pressure pot with dual regulators, 3/8" I.D. material hose, Binks 2100 or 95 Gun w/68 series nozzles and 568 needle.
- **Airless:** Graco 70:1 Min. 3/8" material line. XTR7 Gun Tip size: .017-.021 Output PSI- 5000+

Brush & Roller: Touch up only

- **Brush:** Synthetic bristle
- **Roller:** 1/4" Nap cover with Phenolic Core

Mixing & Thinning

Components: 2

Mix Ratio: 4 Part A : 1 Part B

Pot Life: 60 minutes at 75°F

Mixing: Power mix each part separately, then combine and mix to uniform color & consistency.

Induction Time: None.

Pot life is significantly shorter at higher temperatures and larger mixed volumes. Consult APCO technical representative for more information.

Thinning:

- **Spray:** Up to 12 oz/gal with S121 if necessary

Application

Pre-application: Flush all equipment with thinner S121 or MEK

Temperature: Application range from 50°F-110°F surface temperature. Surface temperature must be 5°F above the dew point. Below 50°F use 357 LT35 low temperature cure.

Method: Apply one coat maintaining a wet edge to achieve a wet film thickness of 8-10 Mils. Apply second coat of 8-10 mils of a contrasting color after 12 hours. Maximum performance will be achieved with two coats totaling 12-16 mils dry film thickness. Dry film thickness over 20 mils is not recommended.

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Application Continued

Inspection: Test for voids in coating film using low voltage holiday detector, ASTM D5162 for steel and ASTM D4787 for concrete. Dry film thickness can be measured with either a calibrated magnetic or electronic dry film thickness gauge.

Clean up & disposal: After use immediately flush all equipment with thinner S108 or MEK. Dispose of all containers, solvents and unused materials in accordance with all local, state and federal regulations.

Curing schedule:

Times based upon 75°F

Dry to touch: 2.5 hours

Dry to recoat: 12 hours

Max recoat: 36 hours

Return to service: 5 Days @ 75°F

Low temperature activator is available for quicker cure times in temperatures below 50°F. Consult a APCO representative for more information.

After 48 hours surface must be mechanically abraded or sweep blasted in order to be top coated.

Dry times are greatly affected by weather conditions and film thickness.

Packaging & Handling:

Unit sizes: Pre measured 5 gallon kit

Shipping Weight: 12.41 lbs/gal

UN Classification: UN1263, PAINT, CLASS 3, PGIII

Limitations: Not suitable for immersion in strong acids, or caustics. Always consult an APCO technical representative before placing into any immersion service environment.