

Product Description

Polyliner 700 is a multifunctional phenol novolac resin that is extremely chemical resistant with a high heat deflection temperature. Polyliner 700 is a thick film novolac lining designed to cure at ambient temperature to provide exceptional corrosion protection for surfaces in severe chemical and physical environments.

Features

- Acid-based Chemical Resistant
- Corrosion Protection
- Extremely Hard and Tough
- Heavy-Duty Chemical Resistant Protective Lining
- Solvent-based Chemical Resistant

Typical Uses

- Containment Wall and Floors Systems
- Crude and Storage Tanks
- Food Processing Facilities
- Internal Tank and Pipe Lining
- Mining and Milling Industries
- Petrochemical Plants
- Power Generating Plants
- Pulp and Paper Industry
- Steel Structures and Bridges
- Water and Wastewater Treatment Plants

Packaging

**1-gallon kit
(3.78 liter)** One 1 gallon can (net 0.75 gal) of Side-A and one 1 quart can (net 0.25 gal) of Side-B

**4-gallon kit
(15.14 liters)** One 5 gallon pail (net 3 gal) of Side-A and one 1 gallon can (net 1 gal) of Side-B

Color

Grey with High Gloss. Finish may vary due to texture and porosity of substrate.

Chalking will occur with extended exposure to sunlight. Subject to color change.

Coverage

Polyliner 700 may be applied at any rate to achieve desired thickness. Theoretical coverage per gallon is 1600 sqft at 1 mil.

Surface Preparation

In general, coating performance is directly proportional to surface preparation. All surfaces must be clean, dry and free of oil, grease, wax, dirt, chalk, salts and other contaminants. Round off sharp edges and rough welds. Burrs and weld spatter should be completely removed.

Technical Data (Based on Draw Down Film)

Mix Ratio 3A : 1B

Coverage Rate 1 gal/100 sqft
0.4 l/sqm

Pot Life at 75°F (24°C), 50% R.H. 30-45 minutes

% Solids Content 100%

Dry Film Thickness per Coat 16 ± 1 mils
406 ± 25 microns

Hardness, ASTM D-2240 80 ± 5 Shore D

Specific Gravity,
Side A 1.39 ± 0.1
Side B 1.07 ± 0.1

Total Solids by Weight, ASTM D2369 100%

Total Solids by Volume, ASTM D2697 100%

**Volatile Organic Compounds
ASTM D2369-81** 0 lb/gal
0 gm/liter

Carbon Steel: Use SSSP Guidelines for surface preparation. Metal surfaces should have an anchor profile of 3 mils (0.003 microns) or more. If metal substrate has "cavitis" or "indentations" apply primer application coat and back roll to completely wet and thoroughly penetrate surface to ensure all voids and irregularities are filled.

For Internal Linings: Abrasive blast to SSSP-SP-5 (White metal) to achieve a surface anchor profile of 22-3 mils.

For Exterior Use: Abrasive blast to SSSP-SP-10 (Near white) to achieve a surface anchor profile of 12-2 mils.

After abrasive blasting, remove all dust or other contaminants by vacuum or dry air blow-down. Abrasive blasted metal surfaces must be primed as soon as possible, do not allow to remain overnight. If flash rusting occurs it must be removed.

Concrete and Masonry: Concrete and masonry to cure at least 28 days. Surface and substrate must be dry and clean. Clean and open surfaces by dry abrasive "brush-off" blast. All concrete laitance should be removed. "Blow" holes and cavities should be opened in order to properly fill and seal. Level protrusions and repair cavities, voids, and cracks. Apply primer application coat and back roll to completely wet and thoroughly penetrate surface to ensure that all irregularities are filled and sealed.

Remove all contaminants and deteriorated concrete. Brush blast to achieve roughed surface sufficient to remove laitance or surface hard-face. Vacuum all concrete surface prior to application of primer. All cracks, rock pockets and voids must be filled with non-shrink grout, and sanded. Concrete must

be free of puddled water or moisture.

Mixing

The volume mixing ratio: 3A:1B. Polyliner 700 may not be diluted under any circumstances. Add Polyliner 700 Side-A into Side-B. Power stir product until completely mixed and uniform color appears, approximately 2-3 minutes.

Application

Applied over: Carbon steel, or concrete.

Surface Preparation Method:

Carbon Steel: SSSP-SP-10, 5 or SP-12 (WJ-4)

Application temperature for Polyliner 700 should be between 50-110°F (air and surfaces; 10-43.3°C). Do not apply product unless temperature is at least 5°F (3°C) above the dew point. Re-coat schedule is 2-8 hours at 70°F (21°C) and dependent upon environment.

Airless: Use Graco 68:1 pump or higher, 206-718 gun with fluid tip of 0.019" (0.4826 mm) or larger orifice size with Reverse-A-Clean tip, 3/8" (0.95 cm) I.D. or larger high-pressure solvent resistant fluid line, 1/2" (1.27 cm) I.D. or larger air supply line. Continuous air source capable of 80 to 100 psi inbound pressure at pump. Equipment of equal performance is acceptable.

Conventional Spray: Variations of conventional production spray equipment such as pressure pot, air assisted airless or high volume, low pressure systems as supplied by Binks, Graco, Nordson, Devilbiss or equal may be used.

Brush: Use solvent resistant short hair or natural bristle brush.

Roller: Use short nap synthetic covers for back rolling. Ribbed metal roller.

Equipment Cleanup

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

Storage

Polyliner 700 has a shelf life of 1 year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

Limitations

The uncured materials used in Polyliner 700 are very sensitive to heat and moisture. Higher temperature and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application. Low temperature and/or low humidity extends the cure time and the use of accelerators may be necessary.

Inspect the installed work of other trades and verify that all such work is complete so that Polyliner 700 may be installed.

All surfaces to receive Polyliner 700 must meet all applicable building and safety codes in the prescribed city, county or state, whichever has jurisdiction.

The substrate must be structurally sound and sloped for proper drainage. No liability is assumed by Crown Polymers for substrate defects and for improper surface preparation and application.

Polyliner 700 must cure at least 24 hours at 75°F (24°C) and 50% relative humidity before any immersion services.

Cure time may be longer at lower temperature. Do not open until ready to use.

Warning

This product contains Epoxy Resin and Curatives.

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