

## PROTAL™ 600 CTE Low VOC

**A Low Volatile Organic Compound High Build Coal Tar Epoxy**

### Description

Protal 600 CTE Low VOC is a two-part high build coal tar epoxy that has low VOC's. It can be applied as a single or two-coat system. It is a polyamide with excellent abrasion and chemical resistance.

### Uses

For long-term corrosion protection of steel and concrete substrates against water, wastewater, seawater, alkaline water and acidic water corrosion. Designed to coat steel piles, sheet piles, lock gates, reservoirs, non-potable water pipelines, treatment / storage tanks, bridges and many other aggressive industrial applications.

### Features

- 0.4 lbs/gal (50 g/l) VOC
- Excellent resistance to water, seawater, wastewater, alkaline water and acidic water
- Good impact resistance
- Excellent flexibility, hardness, and adhesion
- Excellent abrasion resistance
- No primer required
- High build 16 to 25 mils (406 to 635 microns) in one coat
- Can be used with cathodic protection systems
- Exceeds Corp of Engineers C-200, C200a
- Exceeds AWWA C-210 for exterior
- Can be brush or spray applied

### Application

**Steel:** All contaminants shall be removed from the steel surface to be coated. Remove oil, dust, and grease and other contaminants that could interfere with adhesion of the coating. Surfaces shall be free from projections, sharp edges, high points and fillets must be ground smooth including all corners. For immersion service, prepare surfaces by grit blasting to a clean near-white finish, SSPC-SP 10 or NACE No. 2. For non-immersion service, prepare surfaces using SSPC-SPC6 or NACE No.3. Appropriate angular grit shall be used to achieve a 2.0 to 4.0 mil (50 to 100 microns) anchor profile.

**Concrete:** Concrete must be cured 28 days at 77°F (25°C) and 50% relative humidity. All surfaces shall be prepared in accordance with ASTM D4258 and ASTM D4259. All voids in concrete shall be filled and repaired.

**Spray:** A single leg airless unit shall be used. The unit shall be a minimum of 68:1 airless pump. A wet-on-wet spray technique should be used to achieve 11 to 22 mils (280 to 559 microns). The coating thickness should be measured using a wet-film thickness gauge.

**Mixing:** Power mix both A & B separately then combine and power mix thoroughly for two minutes. Do not mix partial kits.



# Protal™ 600 CTE Low VOC

## PROPERTY SPECIFICATIONS

PROPERTIES	ENGLISH	METRIC
Solids by volume	80%	80%
VOC	0.4 lbs/gal	50 g/L
Specific Gravity	1.4	1.4
Minimum Dewpoint/Substrate Differential	Dewpoint +5°F	Dewpoint +3°C
Minimum Substrate Temperature	40°F	5°C
Theoretical Coverage (need to allow for loss during mixing and application)	80 SF/Gal @ 16 mils	1.96 m <sup>2</sup> /L @ 406 microns
Spray Equipment Required	68:1 airless	68:1 airless
Hot Salt Fog 95°F (35°C) ASTM B117	2000 hours	2000 hours
Adhesion ASTM D 4541	3,400 psi	23.4 MPa
Wet Film Thickness Per Coat*		
(minimum)	11 mils	280 microns
(maximum)	22 mils	559 microns
Dry Film Thickness Per Coat*		
(minimum)	8 mils	203 microns
(maximum)	16 mils	407 microns
Flash Point	40°F	5°C
Abrasion Resistance ASTM D 4060-01 1000 cycles, CS17 wheel, 1000 gram load	111 mg loss	111 mg loss
Pot Life @ 77°F (25°C)	2 hour	2 hour
@ 90°F (32°C)	1 hour	1 hour
Dry to Touch @ 50°F (10°C)	6 hours	6 hour
@ 77°F (25°C)	3 hours	3 hour
@ 90°F (32°C)	1.5 hours	1.5 hour
Final Cure Immersion service @ 50°F (10°C)	14 days	14 days
@ 77°F (25°C)	7 days	7 days
@ 90°F (32°C)	5 days	5 days
Minimum Overcoating time @77°F (25°C)	5 hours	5 hours
Temperature (Immersion)	130°F	54°C
Temperature (Atmospheric)	200°F	94°C
Top Coat	Not Recommended	
Ratio by volume (A to B)	4:1	
Gloss	Semi-Gloss	
Color	Black	

\*NOTE: Total film thickness not to exceed 35 mils (889 microns) in thickness to prevent solvent entrapment.

**STORAGE:** Minimum 18 months when stored in original unopened containers at 41°F (5°C) to 110°F (43°C).

**CLEANING:** Clean equipment with Xylene, Toluene or equivalent solvent cleaner. If work stoppage happens, then all material must be cleared out as to not allow product to set within equipment.

**HEALTH AND SAFETY:** Wear protective clothing and ensure adequate ventilation. Avoid contact with skin and eyes. See safety data sheet for further information.

**PACKAGING:** 1 gallon (3.8 liter) and 5 gallon (19 liter) kits. Other sizes available upon request.



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