

# PROTAL™ 600 CTE

## High Build Coal Tar Epoxy

### Description

Protal 600 CTE is a two-part high build coal tar epoxy, that can 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

- 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 up to 26 mils WFT (660 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, use prepare surfaces using SSPC-SPC6 or NACE No.3. Appropriate angular abrasive 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 60:1 airless pump. A wet-on-wet spray technique should be used to achieve 11 to 26 mils (280 to 660 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 minimum two minutes. Do not mix partial kits.

**Repairs:** Surface shall be roughened approximately 1" (25mm) around all repair areas using 60 to 80 grit sandpaper and then remove remaining dust with a clean dry cloth, brush or clean compressed air. Power mix both A&B separately then combine and power mix thoroughly for minimum two minutes. Do not mix partial kits. The coating can then be brush or roll applied to specified mil thickness (not to exceed 26 mils wet film thickness). Cure times are dependent on temperature and will be extended at cooler temperatures. Note: If steel has been exposed in the repair area and flash rust has developed please refer to the Steel surface preparation detailed above.



# Protal™ 600 CTE

## PROPERTY SPECIFICATIONS

PROPERTIES	ENGLISH	METRIC
Solids by weight	76%	76%
VOC	1.9 lbs/gal	230 g/L
Specific Gravity	1.4	1.4
Min / Max Overcoating time @77°F (25°C)	5 hours / 24 hours	5 hours / 24 hours
Wet Film Thickness Per Coat*		
(minimum)	11 mils	280 microns
(maximum)	26 mils	660 microns
Dry Film Thickness Per Coat*		
(minimum)	8 mils	203 microns
(maximum)	19 mils	482 microns
Pot Life @ 77°F (25°C)	2 hours	2 hours
@ 90°F (32°C)	1 hour	1 hour
Dry to Touch @ 50°F (10°C)	6 hours	6 hours
@ 77°F (25°C)	3 hours	3 hours
@ 90°F (32°C)	1.5 hours	1.5 hours
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 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)	76 SF/Gal @ 16 mils	19.7 SF/L @ 406 microns
Temperature (Immersion)	130°F	54°C
Temperature (Atmospheric)	350°F	176°C
Abrasion Resistance ASTM D 4060-01 1000 cycles, CS17 wheel, 1000 gram load	111 mg loss	111 mg loss
Direct Impact Resistance ASTM D2794	100 in. lb.	17 J
Pencil Hardness ASTM D3363	F	F
Top Coat	Not Recommended	
Hot Salt Fog 95°F (35°C) ASTM B117, 2000 hrs	Excellent	Excellent
Flash Point	83°F	28°C
Adhesion ASTM D 4541	3,400 psi	23.4 MPa
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 2 years 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:** 5 gallon (19 liter) kits.  
Other sizes available upon request.



**HOUSTON:**  
9710 Telge Road,  
Houston, Texas,  
U.S.A. 77095  
Tel: 1-281-821-3355  
Fax: 1-281-821-0304

**TORONTO:**  
90 Ironside Crescent,  
Unit 12, Toronto,  
Ontario, Canada M1X1M3  
Tel: 1-416-291-3435  
Fax: 1-416-291-0898

e-mail: [info@premiercoatings.com](mailto:info@premiercoatings.com)

[www.premiercoatings.com](http://www.premiercoatings.com)

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