

# 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-SP6 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.



# 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<br>(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<br>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.



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