

PROTAL 7200™

Fast Cure, High Build Pipeline Coating

Description

Protal 7200 is a VOC free, 100% solids, 2 part epoxy coating specially formulated to compliment FBE coated pipe. It is a high build liquid coating that is brush or spray applied in one coat in the field or shop. It cures very fast to allow quick handling and backfill times.

Uses

On-site protection of girth welds, tie-ins, welds for boring applications, repairs to FBE, push-rack applications, station piping, fittings and fabrication. Also used for main line pipe coating, sacrificial coating for directional drill (ARO) and road bore pipe, and rehabilitation of existing pipelines.

Features

- Fast touch dry and set times
- High temperature resistance up to 203°F (95°C)
- High build (up to 70 mils / 1778 microns in one coat)
- Excellent adhesion (compliments FBE coated pipe)
- High abrasion resistance for drilling applications
- Can be used as an abrasion resistant coating (ARO)
- Safe and environmentally friendly
- Does not shield cathodic protection
- Can be applied with brush, roller or spray
- Available in a variety of packaging options
- Meets AWWA C-210-92 Standard
- Outstanding self-leveling characteristics
- CSA Z245.30 compliant

Application

Brush: Prepare surfaces by abrasive blasting to a clean near-white finish, SSPC-SP 10 / NACE No. 2. Appropriate angular abrasive shall be used to achieve a 2.5 to 5 mil (63 to 127 microns) anchor profile. Independently mix Part A (resin) and Part B (hardener) prior to adding the hardener to base and mix at a slow speed until a constant color is achieved making sure all sides of container are scraped. Apply mixed material onto surface and brush, trowel or roll to required mil thickness. A wet-film thickness gauge shall be used to measure mil thickness. If surface temperature falls below 50°F (10°C), surface should be preheated to achieve faster cure. Preheat may be achieved with a propane torch or induction coil. Resin and hardener component shall be kept warm, at a minimum of 60°F (15°C), to mix more easily.

Spray: Prepare surfaces by abrasive blasting to a clean near-white finish, SSPC-SP 10/ NACE No. 2. Appropriate angular abrasive shall be used to achieve a 2.5 to 5 mil (63 to 127 microns) anchor profile. The equipment shall be a XP70 Plural Component Sprayer or similar designed to mix and atomize 100% solids epoxies. Please refer to the Protal 7200 Plural Spray Application Specification for equipment details. Part A should be heated to 140°F - 160°F (60°C - 71°C) and Part B heated to 100°F - 110°F (38°C - 43°C). Hose bundle shall be set at 140°F - 150°F (60°C - 65°C). A wet on wet spray technique should be used to achieve a minimum thickness of 20 mils (508 microns). The coating thickness should be measured using a wet-film thickness gauge. The equipment settings are only guidelines and may vary based on equipment.

For complete application instructions please refer to the Protal 7200 Application Specifications.



TECHNICAL DATA SHEET

Storage

Minimum 24 months when stored in original containers @ 40°F (4°C) to 105°F (41°C). On job site where temperatures are below 50°F (10°C) product should be kept warm to mix properly (65°F to 85°F optimal).

Cleaning

Clean equipment with Xylene, MEK, Acetone or equivalent solvent cleaner.

HSE

Wear protective clothing and ensure adequate ventilation. Avoid contact with skin and eyes. See material safety data sheet for further information.

Packaging

1, 1.5 and 2 liter kits and 75 liter & 800 liter kits standard. Dual cartridge repair tubes (50 ml, 400 ml & 1000 ml) and dispensing guns available for small repair areas.

Tech Data

Properties	Imperial	Metric
Solids Content	100%	100%
Mixed Material - (Mixed) @ 77°F (25°C)		
Specific Gravity	1.63	1.63
Viscosity	170,000 cps	170,000 cps
Color	Green	Green
Mixing Ratio (A/B) by Volume	3 Parts Base: 1 Part Hardener	3 Parts Base: 1 Part Hardener
Cure Times		
Pot Life @ 77°F (25°C)	14 - 17 Minutes	14 - 17 Minutes
Pot Life @ 97°F (36°C)	7 - 8 Minutes	7 - 8 Minutes
Handling Time @ 77°F (25°C) Shore D 80 min.	2.5 - 3 Hours	2.5 - 3 Hours
Handling Time @ 117°F (47°C) Shore D 80 min.	1 Hour	1 Hour
Handling Time @ 157°F (69°C) Shore D 80 min.	20 Minutes	20 Minutes
Recoat Window		
@ 57°F (14°C)	5 Hours	5 Hours
@ 77°F (25°C)	2 Hours	2 Hours
@ 97°F (36°C)	1 Hour	1 Hour
Theoretical Coverage @ 30 mils/liter	14 ft ²	1.3 m ²
Thickness - Weld Joints / FBE Repairs		
Minimum/Maximum	20/70 mils	508/1778 microns
Recommended	25 - 30 mils	635 - 762 microns
Thickness - Bore Pipe		
Minimum/Maximum	40/70 mils	1016/1778 microns
Recommended	45 - 60 mils	1143 - 1524 microns

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TECHNICAL DATA SHEET

Tech Data

Properties	Imperial	Metric
Cathodic Disbondment Test (ASTM G95)		
28 Days @ 77°F (25°C)	3 mm	3 mm
28 Days @ 150°F (65°C)	4 mm	4 mm
28 Days @ 185°F (85°C)	6 mm	6 mm
28 Days @ 203°F (95°C)	6 mm	6 mm
Hardness (ASTM D-2240-02)	Shore D 80+	Shore D 80+
Impact Resistance (ASTM G14-04) @ 32°F (0°C)	70.6 in-lbs.	70.6 in-lbs.
Tabor Abrasion (ASTM 4060-07)		
-1000 cycles, CS-17 wheels, 1000 g. load	1,270 cycles per mil (93 mg)	1,270 cycles per mil (93 mg)
-5000 cycles, CS-17 wheels, 1000 g. load	1,612 cycles per mil (338 mg)	1,612 cycles per mil (338 mg)
Gouge Resistance (Partech Test - 40 kg load)	15.4 mils	391 microns
Dielectric Strength (ASTM D-149)	450 V/mil	17,716 V/mm
Adhesion to Steel (ASTM D-4541-02)	3,956 psi	27.3 MPa
Adhesion to FBE (ASTM D-4541-02)	2,579 psi	17.8 MPa
Service Temperature	-40°F to 203°F	-40°C to 95°C
Application Temperature	-30°F to 212°F	-34°C to 100°C
Note: If temperature falls below 50°F (10°C), surface must be preheated and maintained throughout the cure process.		



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