ChemLINE® 784

TECHNICAL DATA SHEET

**This Technical Data Sheet supersedes those previously issued.*

DESCRIPTION

ChemLINE® 784 is a high-functionality, two-component thermoset polymer coating applied as a base coat and top coat. Designed for long-term corrosion protection, it provides superior chemical resistance to 98% sulfuric acid, methanol, 37% hydrochloric acid, methylene chloride, 50% sodium hydroxide, acetic acid, and more. Its ether-linked polymer contains 28 functional groups per molecule, forming up to 784 cross-links when cured to help resist acid attack. Cure options include ambient or low-temperature forced-air cure, depending on substrate and service conditions.

TECHNICAL DATA



Color	Red, Grey
Solids Content, %	85% by volume
Finish	Gloss
VOC's	As supplied Grey 129 g/l (1.08 lb/gal) | Red 130 g/l (1.085 lb/gal) Thinned to max level Grey 176 g/l (1.47 lb/gal) | Red 178 g/l (1.49 lb/gal)
Pot Life	45 minutes at 75°F (24°C)

SUBSTRATE & SURFACE PREPARATION

General	All surfaces to be coated should be clean, dry, and free from all contamination. All oil, grease, and other contaminants must be removed according to SSPC-SP 1 Solvent Cleaning prior to high pressure fresh water washing.
Steel Substrate	All surfaces to be coated for immersion service shall be abrasively blast cleaned to NACE No 2 / SSPC-SP 10 / ISO Sa 2½ with a 3-4 mil (75 to 100 micron) blast profile. *Non-Immersion: Nace No 3 / SSPC-SP 6
Stainless Seel	All surfaces to be coated shall be abrasively blast cleaned to SSPC-SP 17 with a 3-4 mil (75 to 100 micron) blast profile.
Concrete	Concrete must be cured for atleast 28 days. Surface to be coated shall be prepared in accordance to Nace No 6 / SSPC-SP 13. The abrasively blasted surfaces shall result in an anchor pattern of CSP3 to CSP5 anchor profile as compared to the ICRI Concrete Surface Profile Chips.

MIXING & THINNING

Mixing	Mechanically agitate Component A (resin) for 1-2 minutes. Slowly add Component B (catalyst) to the resin and mix thoroughly for 3-5 minutes using a high shear (SSPC recommended) mechanical mixer. The mixture must be homogeneous and uniform in consistency.	
Ratio	One gallon kit	Part A: 0.89 gallons (3.38 liters) | Part B: 0.11 gallons (0.40 liters)
	Five gallon kit	Part A: 4.47 gallons (16.9 liters) | Part B: 0.53 gallons (1.99 liters)
Thinning	(if needed) Reduce with 0-5% (by volume) Toluene or Xylene.	

APPLICATION GUIDELINES

Equipment Type	Coating should be applied via airless spray equipment, pump size 45:1 or greater. Recommended airless tip sizes .017 to .023 inch. 3/8" ID hose size, 1/4" ID hose whip. *Contact APC Technical Service for additional information	
Dry Film Thickness (Total system thickness)	Average: 12-14 mils DFT (300-350 microns) Minimum: 10 mils DFT (250 microns) Maximum: 18 mils DFT (450 microns)	
Theoretical Coverage	at 1 mil: 1363 ft^2 / gallon (25 microns) at 12 mils: 114 ft^2 / gallon (300 microns) at 14 mils: 98 ft^2 / gallon (350 microns) *Allow for loss in mixing and application	at 1 mil: 33.4 m^2 / liter (25 microns) at 12 mils: 2.7 m^2 / liter (300 microns) at 14 mils: 2.4 m^2 / liter (350 microns) *Allow for loss in mixing and application
Re-coat Times	59ºF (15ºC) = minimum 12 hours, maximum 3 days (72 hours) 77ºF (25ºC) = minimum 8 hours, maximum 2 days (48 hours) 86ºF (30ºC) = minimum 6 hours, maximum 2 days (48 hours)	
Holiday Testing	High voltage holiday detector set at 3,000 volts, prior to repairs. Touch ups tested at 100 volts / mil.	

APPLICATION CONDITIONS

Material	55ºF (13ºC) – 75ºF (24ºC)
Substrate	59ºF (15ºC) – 104ºF (40ºC)
Humidity	10% – 75%

CLEAN-UP & SAFETY

Clean-up	ChemLINE® 784 can be cleaned up Acetone (preferred) or MEK.
Safety	Consult SDS

PACKAGING, HANDLING & STORAGE

Shelf Life	12 months
Storage	72ºF – 90ºF (22ºC - 32ºC) | 0 - 100% RH Consult SDS or contact APC Technical Service for more info.

Information on TDS documents represent typical data for the mixed coating formulation (part A + part B) using 'as supplied' materials as of the date hereof. All information is correct to the best of our knowledge. Values should not be construed as specifications. Please contact Advanced Polymer Coatings' Technical Service Team if you have any questions related to this data sheet or application.

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ADVANCED POLYMER COATINGS