# ChemLINE® 784 ES Elevated Service

# TECHNICAL DATA SHEET

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

## DESCRIPTION

ChemLINE® 784 ES (Elevated Service) is engineered for concentrated acids, aggressive chemicals, and elevated operating temperatures. It provides chemical resistance to 98% sulfuric acid, methanol, 37% hydrochloric acid, methylene chloride, 50% sodium hydroxide, acetic acid, and more. This two-coat system builds on ChemLINE® 784's chemical and corrosion resistance, using APC's highly cross-linked polymer technology to deliver long-term protection and maintain lining integrity under severe chemical and thermal conditions.

## TECHNICAL DATA




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| Color | Red, Grey |
| Solids Content, % | 84% by volume |
| Finish | Semi-Gloss |
| VOC's | As supplied Grey 141 g/l (1.18 lb/gal) \| Red 143 g/l (1.19 lb/gal)<br>Thinned to max level Grey / Red 190 g/l (1.59 lb/gal) |
| Pot Life | 120 minutes at 75°F (24°C) |

## SUBSTRATE & SURFACE PREPARATION

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| 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 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. |
| Stainless Steel | 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. |

## MIXING & THINNING

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| 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: 0.98 gallons (3.7 liters) \| Part B: 0.02 gallons (0.08 liters) |
| | Five gallon kit | Part A: 4.89 gallons (18.5 liters) \| Part B: 0.11 gallons (0.40 liters) |
| Thinning | (if needed) Reduce with 0-5% (by volume) Toluene or Xylene. | |

## APPLICATION GUIDELINES

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| Equipment Type | Coating should be applied via airless spray equipment, pump size 45:1 or greater.<br>Recommended airless tip sizes .017 to .023 inch. 3/8" ID hose size, 1/4" ID hose whip.<br>*Contact APC Technical Service for additional information | |
| Dry Film Thickness (Total system thickness) | Average: 12-14 mils DFT (300-350 microns)<br>Minimum: 10 mils DFT (250 microns)<br>Maximum: 18 mils DFT (450 microns) | |
| Theoretical Coverage | at 1 mil: 1331 $ft^2$ / gallon (25 microns)<br>at 12 mils: 110 $ft^2$ / gallon (300 microns)<br>at 14 mils: 95 $ft^2$ / gallon (350 microns)<br>*Allow for loss in mixing and application | at 1 mil: 32.6 $m^2$ / liter (25 microns)<br>at 12 mils: 2.6 $m^2$ / liter (300 microns)<br>at 14 mils: 2.3 $m^2$ / liter (350 microns)<br>*Allow for loss in mixing and application |
| Re-coat Times | 59ºF (15ºC) = minimum 12 hours, maximum 3 days (72 hours)<br>77ºF (25ºC) = minimum 8 hours, maximum 2 days (48 hours)<br>86ºF (30ºC) = minimum 6 hours, maximum 2 days (48 hours) | |
| Holiday Testing | High voltage holiday detector set at 3,000 volts, prior to repairs.<br>Touch ups tested at 100 volts / mil. | |

## APPLICATION CONDITIONS

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| Material | 55ºF (13ºC) – 95ºF (35ºC) |
| Substrate | 59ºF (15ºC) – 104ºF (40ºC) |
| Humidity | 10% – 50% |

## CLEAN-UP & SAFETY

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

## PACKAGING, HANDLING & STORAGE

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| Shelf Life | 12 months |
| Storage | 72ºF – 90ºF (22ºC - 32ºC) \| 0 - 100% RH<br>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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