CHEMCOAT 225CR-HT

Technical Data Sheet

ATLAS POLYMERS

MATERIAL DESCRIPTION

Atlas ChemCoat 225CR-HT is a high performance coating system engineered to provide excellent protection to substrates immersed in acids, amines and hydrocarbons at high temperatures while offering excellent erosion / corrosion resistance.

INTENDED USES

- Amine Pumps
- Chemical Holding Vessels
- Oil / Gas Separators
- Oil / Water Separators
- Chemical drains and channels
- Autoclaves
- Condensers
- Distillation Equipment

STORAGE AND TECHNICAL INFORMATION

Unit Size	1 Kg
Shelf Life	3 Years when stored between 20ºF and 86ºF
Application Temperature (Ambient)	40 °F - 95 °F (Ambient)
Mixing Ratio (Volume)	5 Parts Base to 1 Part Hardener
Coverage Rate @ 20 mil	13 ft^2 per unit
Volume Capacity	25.9 in^3 per unit
VOC	0.0 Lbs/Gal; 0.0 g/L
Sag Resistance	No sag at 39 mils
Available Colors	Light Gray, Gray

PRODUCT PERFORMANCE

Heat Resistance:	464 °F Dry / 248 °F Immersed	NACE TM 0174
Compressive Strength (psi):	15,460	ASTM D695
Tensile Strength (psi):	3,200	ASTM D1002
Flexural Strength (psi):	8,850	ASTM D790
Hardness:	89 Shore D	ASTM D2240
Heat Distortion Temperature:	356ºF when fully post-cured	ASTM D648
Abrasion Resistance (1Kg Load):	36 mm^3	TABER H-10-wet

CURE SCHEDULE

Service / Temperature	41 °F	59 °F	77 °F	86 °F	90 °F
Pot Life	1 hr	50 mins	30 mins	15 mins	10 mins
Light Traffic	10 hrs	8 hrs	3 hrs	2 hrs	1 hr
Heavy Traffic	3 days	60 hrs	2 days	18 hrs	15 hrs
Full Cure (Chemical Immersion)	7 days	6 days	5 days	3 days	2 days

CHEMICAL RESISTANCE *EX = 30 Days @ 72ºF

5% Sulfuric Acid	Ex*	Monoethanolamine	Ex*	Heptane	Ex*
Ethylene Glycol	Ex*	Triethanolamine	Ex*	Kerosene	Ex*
5% Hydrochloric Acid	Ex*	Carbon Dioxide	Ex*	Xylene	Ex*
50% Sodium Hydroxide	Ex*	Diethanolamine	Ex*	Toluene	Ex*

TECHNICAL SUPPORT

Atlas ChemCoat 225CR-HT is backed with technical support from staff engineers, certified coatings inspectors, research laboratories and personnel 24 hours a day 7 days a week.
Call (786) 312-1231

MADE IN THE USA

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Material Application Guidelines

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SURFACE PREPARATION

Surfaces to which Atlas ChemCoat 225CR-HT is to be applied must be clean firm and dry. Any contamination such as rust, mill scale, dust, oils, grease, fats, waxes, laitance and other coatings/ sealers must be removed and or washed prior to the application of ChemCoat 225CR-HT.

- Surfaces should be abraded to provide a surface profile of CSP-2 for concrete and NACE No. 2 / SSPC-SP 10 for metals. An angular profile of no less than 3 mils should be present in metal substrates. All blasting should be done with an angular abrasive, surface is to be free of any level protrusions, holes, cracks, etc. that are larger than 1/16".
- New concrete must cure for a minimum of 28 days and have a vapor transmission rate of no more than 3 pounds per 1,000 ft^2 over a 24 hour period. This could be confirmed through a calcium chloride test as per ASTM E-1907.
- Metal surfaces that have been exposed to soluble salts should, immediately prior to application contain less than 30 mg/cm^2. Concrete that has been contaminated with chemicals or other foreign matter must be neutralized to a neutral pH prior to the application of ChemCoat 225CR-HT.

MIXING

1. Pre-mix the Base and Hardener separately to ensure that any settled solids are properly dispersed.
2. Pour the contents of the Hardener into the Base and mix until color is uniform and free of any streaks.
3. Pour contents into a clean container and mix again.
4. Using a jiffy style mixer is recommended for mixing large quantities.
5. Mixing at temperatures below 41ºF may be difficult. It is recommended that the Base and Hardener be heated to a temperature between 68 °F and 77 °F in a hot water bath prior to mixing in order to easy the mixing process.
6. Ensure correct mixing. Poor mixing will result in soft spots, poor curing and loss of physical properties.

APPLICATION

1. Atlas ChemCoat 225CR-HT may be applied with a brush, applicator or squeegee. It may be applied as a single coat system with a thickness of 25 to 30 mils or as a two coat system with each coat applied at a thickness of 15 to 20 mils.
2. Ensure the profile is wetted out by stippling the product in with a brush prior to applying a coat of material.
3. If a two coat application is being carried out. Allow the first coat to cure for a minimum of 16 hours, then wash off any amine bloom and sweep blast with a fine abrasive prior to applying the second coat.
4. If the coating is going to be immersed during service, it is strongly recommended that it be post-cured at either 140 °F for 24 hours or 212 °F for 2 hours. If the temperature increase during service will be gradual, in-service post cure will be an option. Only exercise this option once the coating has been allowed to cure for 24 hours at a minimum of 68 °F.

CLEAN-UP AND CONSIDERATIONS

Clean Atlas ChemCoat 225CR-HT from tools with isopropyl alcohol, acetone or mineral spirits. This should only be done before it has hardened.

Once fully cured ChemCoat 225CR-HT may be cleaned with most commercial and industrial cleaners. Always rinse with clean water after cleaning.

SAFETY & WARRANTY

Atlas ChemCoat 225CR-HT is an epoxy novalac resin system. Please refer to the Material Safety Data Sheets prior to using this product. Do not weld on or near the Hardener epoxy, hazardous fumes will be released.

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