

CHEMCOAT 225CR1

Technical Data Sheet



ATLAS
POLYMERS

MATERIAL DESCRIPTION

Atlas ChemCoat 225CR1 is a high performance barrier system engineered to provide excellent protection against a wide range of aggressive chemicals found in today's industry. ChemCoat 225CR1 is engineered to repel attacks from most acids, alkalis, hydrocarbons, amines and alcohols. USDA approved for incidental contact with food.

INTENDED USES

- Pumps
- Chemical Holding Vessels
- Secondary Containments
- Tanks and Tank Pads
- Chemical drains and channels
- Chemical loading and off-loading areas
- Walkways
- Industrial floors subject to chemicals

STORAGE AND TECHNICAL INFORMATION

Unit Size 0.75 Gallons
Shelf Life 3 Years when stored between 20 °F and 86 °F
Application Temperature (Ambient) 40 °F - 95 °F (Ambient)
Mixing Ratio (Volume) 2 Parts Base to 1 Part Hardener
Coverage Rate @ 12 mil 100 ft² per unit
Volume Capacity 173 in³ per unit
VOC 0.0 Lbs/Gal; 0.0 g/L
Viscosity (cP) 1,300-1,600
Available Colors Light Gray, Gray, Red

PRODUCT PERFORMANCE

Heat Resistance:	392 °F Dry / 150 °F Immersed	NACE TM 0174
Compressive Strength (psi):	7,000	ASTM D695
Tensile Strength (psi):	4,070	ASTM D638
Flexural Strength (psi):	4,000	ASTM D790
Hardness:	85 Shore D	ASTM D2240
Heat Distortion Temperature:	4.3 ft-lb/in	ASTM D4226
Abrasion Resistance (1Kg Load):	8.10%	ASTM D 638

CURE SCHEDULE

Service / Temperature	41 °F	59 °F	77 °F	86 °F	90 °F
Pot Life	40 mins	32 mins	20 mins	16 mins	10 mins
Light Traffic	1 day	16 hrs	8 hrs	5 hrs	3 hrs
Heavy Traffic	3 days	48 hrs	1 days	18 hrs	15 hrs
Full Cure (Chemical Immersion)	NR	14 days	6 days	5 days	2 days

CHEMICAL RESISTANCE *EX = 30 Days @ 72°F

98% Sulfuric Acid	Ex*	30% Phosphoric Acid	Ex*	Ethanol	Ex*
50% Sodium Hydroxide	Ex*	30% Ammonia	Ex*	Skydrol	Ex*
20% Hydrochloric Acid	Ex*	30% Citric Acid	Ex*	Xylene	Ex*
10% Nitric Acid	Ex*	10% Chromic Acid	Ex*	Toluene	Ex*

TECHNICAL SUPPORT

Atlas ChemCoat 225CR1 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

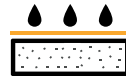
Surfaces to which Atlas ChemCoat 225CR1 is to be applied must be clean firm and dry. Any contamination such as rust, mill scale, dust, oils, grease, fats, waxes, laitance and other coatings/sealers must be removed and or washed prior to the application of ChemCoat 225CR1.

1. Surfaces should be abraded through mechanical means to provide a surface profile of CSP-2 for concrete and NACE No. 4 / SSPC-SP 7 for metals. All blasting should be done with a fine abrasive, surface is to be free of any level protrusions, holes, cracks, etc. that are larger than 1/16".
2. 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 ft² over a 24 hour period. This could be confirmed through a calcium chloride test as per ASTM E-1907.
3. Concrete that has been contaminated with chemicals or other foreign matter must be neutralized to a neutral pH prior to the application of ChemCoat 225CR1. Metal surfaces that have been exposed to soluble salts should, immediately prior to application contain less than 30 mg/cm².
4. Please note that any surface irregularities should be properly addressed prior to the application of ChemCoat 225CR1. To smooth a rough surface, apply Atlas SyGen, an epoxy Based synthetic high performance barrier system, prior to applying Atlas ChemCoat 225CR1.



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 41°F 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 225CR1 may be applied with a brush, roller (3/8" nap), squeegee or airless sprayer. Recommended spray equipment is a 68:1 airless sprayer with reverse-a-clean tips, orifice size of 0.031" – 0.035". Trace heated lines should also be used with this equipment setup.
2. Multiple coats can be applied within 12 hours of the previous coat @ 75°F. Maximum recoat @ 75°F is 48 hours.
3. Although ChemCoat 225CR1 can be applied in a single coat, it is strongly recommended to apply it in two 12 mil coats to prevent the film discontinuities known as pin-holes.
4. Optional: For a slip resistance finish, add fine sand or Atlas AG01 aggregate to rejection after the first coat. Allow to harden to "Light Traffic", brush and blow all loose aggregate off and apply second coat as in step 2 above.



CLEAN-UP AND CONSIDERATIONS

Clean Atlas ChemCoat 225CR1 from tools with isopropyl alcohol, acetone or mineral spirits. This should only be done before it has hardened.

Once fully cured ChemCoat 225CR1 may be cleaned with most commercial and industrial cleaners. Always rinse with clean water after cleaning. Aggressive cleaning chemicals should not be left standing over for longer than 3 hours.



SAFETY & WARRANTY

Atlas ChemCoat 225CR1 is an epoxy 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.

Atlas Polymers, Corp. guarantees this product will meet the performance claims stated herein when material is stored and used as instructed in this document. Atlas Polymers further guarantees that all its products are carefully manufactured to ensure the highest quality possible and tested strictly in accordance with universally recognized standards. Since Atlas Polymers has no control over the use of the product described herein, no warranty for any application can be given.

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