Gulf Coast Paint

CHEMICAL/INDUSTRIAL MAINTENANCE COATINGS

Chemical Mastic CM-15

Hi-Chem Internal Chemical Lining System

Product Description **V.O.C. Compliant**

CM-15 Chemical Mastic is a 2 component, high solids, high build amine adduct cure epoxy mastic. CM-15 is a tough abrasion resistant thin film coating that is designed for tank linings. CM-15 has excellent chemical resistance and is ideal as a thin film lining for gasoline and fuel oil storage tanks, vessels, piping and concrete tanks, silos, U-drains, sumps, sewers, secondary containment areas and other corrosive applications.

Technical Data

Generic Type:	Amine adduct Cured epoxy
Colors:	10 Tile 11 Light Gray 13 Medium Gray Black
Finish:	High Gloss-85% @ 60°F
Volume Solids:	81.6
VOC Content:	161 grams/liter 1.36 lbs/gal
Components:	Two
Mixing Ratio:	By volume use 4 Parts Base "A" to 1 Part Hardener "B"
Pot Life:	3 hours @ 75°F When reduced
Thinning:	Up to 1 pint S-74 Per gallon CM-15
Application:	Airless or Conventional Spray. (Can be brushed or rolled)
Coverage:	1309 sq. ft. at 1.0 mil DFT (Theo.)
Recommended Thickness:	For internal linings 3 coats @ 5-7 mils DFT Per coat
Dry Time @ 75°F & 50% R.H.:	Recoat:8-48 hours Final Cure: 5-7 days
Application Temperature:	45° to 140°F
Service Temperature (Internal):	Up to 150°F Depending upon chemical
Clean-Up	S-74, MEK or Proprietary Epoxy thinners
Flash Point:	For CM-15-80°F For S-74-20°F

Product Uses

CM-15 Chem-Mastic is designed for use as a tank lining and industrial maintenance coating in petroleum refineries, pulp and paper mills, chemical processing plants, sewage and waste water treatment facilities, electric power plants, off-shore drilling platforms, oil field production areas, fertilizer plants, coal handling and mining operations, marine installations, and many other industries.

Chemical Resistance

A. Immersion Service

Regular Gasoline	VM&P Naptha
Unleaded Gasoline	Kerosene
Premium Unleaded Gasoline	Mineral Spirits
Sweet & Sour Crude	Fire Water
Diesel Fuel	JP-4, JP-5, Jet Fuel

B. Semi-Immersion and Splash & Spillage Service

Acetic Acid	Up to 10%	Xylene
Hydrochloric Acid	Up to 25%	Toluene
Nitric Acid	Up to 10%	Para Xylene
Citric Acid	Up to 10%	Skydrol 500 B
Sulfuric Acid	Up to 40%	
Ammonium Hydroxide	Up to 15%	
Sodium Hydroxide	Up to 50%	
White & Black Liquor	Up to 50%	
Brine		

To determine the best performing lining system for a given service, we recommend thorough chemical testing by the user before any internal lining system is selected or applied. Contact manufacturer for any additional assistance.

Surface Preparation

A. Carbon Steel

All surface contamination, such as dirt, dust, grease, oil and other deposits must be removed prior to abrasive blast cleaning. Solvent Cleaning as outlined in Steel Structures Painting Council's Specification SSPC-SP1 should be used to remove all foreign deposits of chemicals; they also must be removed by pressure washing and followed by a thorough water rinsing.

Surface Preparation (cont.)

Remove all rust, mill scale, loose paint, and any previous existing coatings by dry abrasive blasting all steel surfaces before applying the self-priming CM-15.

For Immersion or severe chemical exposure, abrasive blast the metal surface to a minimum "Near-White Metal Blast" as outlined in Steel Structures Painting Council's Specification SSPC-SP10-63T, Volume 2, Section II. A "White Metal Blast" SSPC-SP5 may be required for certain unique applications or services. For additional detailed information procedure for linings contact Gulf Coast Paint.

For Non-Immersion services and less aggressive chemical exposures, SSPC-SP6 Commercial Blast Cleaning is acceptable. All blasted steel surfaces must be coated within 4-6 hours after blasting, or before any visible "rust-back" occurs. Surface should be clean and dry before applying Primer Coat.

B. Concrete

New Concrete must be cured at least a minimum of 28 days before applying a coating. All laitance, efflorescence, chemical contaminants, grease, oil and other foreign material must be removed. The prepared surface must be clean, dry and structurally sound.

Accepted methods of surface preparation are dry abrasive blast, wet abrasive blast, vacuum Blastrac, high pressure water blast, scarifying, scabbling and acid etch/rinse. Many times, a combination of the above methods are used.

Voids, cavities, spalled areas, and other structural defects should be trowel-grouted smooth with CF-613 Chem-Crete Epoxy Crack Filler, or PC-1100 Epoxy Mortar.

Important

Consult Gulf Coast Paint regarding the testing of the concrete for proper pH readings and degree of surface porosity in order to assure maximum adhesion of the coating system. For additional information on preparation of concrete surfaces, refer to Technical Bulletin GCP-SPC-I. CM-15 concrete lining system uses either PC-149 or PC-150 Concrete Primer as the first coat on concrete.

Mixing Instructions

Do not mix until the surface to be coated is ready.

Mixing Instructions –cont.

CM-15 is prepared for use by mixing 4 volumes of pigmented base (Part A) with 1 volume of Hardener (Part B) for a minimum of 5 minutes with a powered Jiffy Miser. Move the blade around in the mixing

container so that no unmixed material is trapped against the sides or bottom. **"Boxing" or hand stirring is not adequate.**

No induction time is required. CM-15 is ready for use immediately after mixing. If necessary, reduce up to 1 pint of Reducer S-74 per gallon of mixed CM-15. Overthinning reduces the high film build capability. In cold weather, storage at 70°F or above for at least 24 hours prior to use will facilitate mixing and application

Pot Life

The pot life of CM-15 is about 1 hour at 75°F if not reduced. When reduced with S-74, as directed, it is about 3 hours at 75°F. These times will be shorter at higher temperatures.

Application Procedure

CM-15 can be applied by brush, roll or spray.

1. Airless spray (preferred method). Use a minimum of 20.1 ratio pump and 75 psi inbound air pressure, a .019-.023 inch tip orifice and adjust fluid pressure for proper atomization.

2. Conventional spray. Use a DeVilbiss P-MBC gun with "D" tip and #64 aircap, or equivalent; ½ inch ID material line and dual regulated pot. Agitation is not required.

3. Brush. Use short natural bristles.

4. Roller. Medium nap phenolic core.

When spraying, use a 50% overlapping crosshatch pattern to minimize the occurrence of pinholes.

Using this technique it is possible to achieve up to 10 mil DFT in one application. In very hot weather slight additional thinning may be required for flow and appearance.

For any special applications, consult Gulf Coast Paint for details.

Gulf Coast Paint
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