CoatMasters®

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TECHNICAL DATA SHEET

PRODUCT DESCRIPTION:

CM 6007 Epoxy HS NOVO Coating (Polyamine Filled System) is a two-component system based on high solids and high molecular weight epoxy resin and curing agent, for superior corrosion resistance from chemicals, such as acids and alkalis exposures. The epoxy coating mixture provides high crosslinking film density, adhesion, and does not contain any coal-tar. It is a self-priming coating and can be applied in multiple coats with excellent recoat-ability characteristics for up to several days. It can be top coated with polyurethanes and polyaspartic coating systems for specified finishes.

The product is mainly used to provide superior corrosion, waterproofing, and chemical protection on concrete structures and steel pipe, applied on either above or below ground installations. The filled systems provide higher abrasion and wear resistance and increased overall fluid resistance, ideal for filling voids or uneven surfaces on concrete applications, composite materials, and other metal substrates. It meets or exceeds the performance requirements of the US Army Corps of Engineers, Paint Specification C200.

The CM 6007 Epoxy HS NOVO Coating (Polyamine Filled System) exhibits overall aged flexibility and outperforms other coal-tar formulated epoxy systems due to its increased recoatability period and higher temperature resistance to 400°F. The higher solids characteristics and superior performance enables the material to be applied at a lower dry film thickness (DFT) thus providing increased coverage. It is available in various colors, such as black, blue, green and red colors.

The CM6007 Epoxy HS NOVO can be modified for anti-slip and/or anti-skid surface application on horizontal surfaces, compatible with aluminum silicate, micronized polypropylene, micronized poly tetra-fluoroethylene (PTFE), and silica sand, according to desired surface appearance from 3-5% premixed or via broadcast.

TECHNICAL DATA:

Polymer Type: Novolac Epoxy Resins (Part A) and Polyamine Curing Agent (Part B)

Total weight solids: 85 % +/- 1

Weight per Gallon (lbs/gal): 11.78 +/- 0.10 (filled)

Recommended minimum dry film thickness (DFT) for following applications:

Application	Dry-Film (Thickness)	Estimated equivalent coats	QC Check	
	Recommended Minimum	3/8"- 3/4" nap size roller	Wet-Film (Thickness)	
New Surfaces (horizontal)	10 - 30 mils	3/8" nap 1-3-coats	12-35 mils per coat	
New Surfaces (vertical) use with modified Part-A	40 - 90 mils	3/4" nap 1-3 coats	50-100 mils per coat	
Re-Surfaced (horizontal)	20 - 40 mils	3/8" – 3/4" nap 1-3-coats	25-50 mils per coat	
Re-Surfaced (vertical) use with modified Part-A	40 - 120 mils	3/4" nap 1-3 coats	50-140 mils per coat	

Note: For chemical resistance requirements maintain 3-coats of application.

Required engineering and service design, minimum thickness could exceed dry-film thickness range recommendation.

Overcoat recommended duration at 77°F: 7-days (Maximum recoat window)

Tack Free: 6 – 7 hours at 77°F (Minimum recoat window)

Dry Hard: Requires 24-hrs set cure time at 77°F

Meets Federal and State VOC limit requirements for volatile organic components (VOC).

Theoretical Coverage Rates:

Spread Rates based on Part A & B mix	Desired Final Dry-Film (Thickness) and Equivalent Spread Rates		
New Surfaces (horizontal)	10-mils; 140 sq. ft per gallon	30-mils; 50 sq.ft. per gallon	
New Surfaces (vertical) use with modified Part-A	40-mils; 35 sq.ft. per gallon	90-mils; 15 sq.ft. per gallon	
Re-Surfaced (horizontal)	20-mils; 68 sq.ft. per gallon	40-mils; 35 sq.ft. per gallon	
New Surfaces (horizontal)	40-mils; 35 sq.ft. per gallon	120-mils; 11 sq.ft. per gallon	

SURFACE PREPARATION:

The following conditions generally apply to surfaces to be coated, unless directly specified. The surface must be dry clean (no oils or grease) and free of any dust or any type of loose materials that will impair bonding to the substrate. Always check the test substrate for adhesion performance prior to applying the product. The CM 6007 Epoxy HS NOVO Coating (Polyamine Filled System) is recommended to be used as-is. If thinning is required, add CM Thinsol to a maximum of 10% by volume only. DO NOT THIN WITH ANY OTHER SOLVENTS and shall void warranty if contaminated/mixed with un-approved material.

New Surface Preparations:

In preparation for coating, always check for environmental conditions. The difference between the surface temperature to be coated and the measured dew point in the environment must not be less than 5 degrees Fahrenheit for coating applications to be performed on any type of the surfaces listed below.

(a) **Concrete** – the surface to be applied must be free from any dirt or other foreign materials that will impair bonding to substrate. Refer to NACE No. 6 / SSPC 13 for Surface Preparation of Concrete, must meet the minimum ASTM D4258 for surface cleaning method to remove any type of foreign contaminants. As needed, other surface cleaning options stated under the guideline can be employed, such as ASTM D4259 or ASTM D4260.

Check for moisture content prior to coating and must not exceed over 12% prior to coating application. The concrete surface will be tested for surface moisture prior to coating application, using either a plastic sheet method referencing ASTM D4263 for qualitative (PASS/FAIL) visual evaluation or a portable handheld instrument for quantitative evaluation, using an electrical resistance or electrical impedance (ASTM F2659). The quantitative method takes precedence over qualitative methods in determining approval to proceed in coating applications.

- (b) **Steel** preparation for immersion service requires abrasive blasting according to SSPC-SP10 with jagged blast profile and not peened ideally at 2 mils. Preparation for non-immersion service requires standard commercial blasting according to SSPC-SP6.
- (c) **Composite Materials / Other Surfaces** Please contact our technical sales representatives for recommended surface preparations.

MIXING INSTRUCTIONS:

The CM 6007 Epoxy HS NOVO Coating (Polyamine Filled System) come in kits of Part A and Part B components and are proportioned to be mixed together until the appearance of the mixture is consistently homogenous. IMPORTANT: Mix contents of Part B separately first, using a helical mixing blade attached to an 8-amp handheld mixer prior into mixing with Part A.

Ratio: Part A to Part B (1:1 by volume) or Part A to Part B (1:1.4 parts by weight)

If necessary, to thin the viscosity add 10% max volume of CM Thinsol. Do not change the volume ratio of Part A & B component, all material in the container must be mixed together prior to use. A drop-in viscosity may be initially observed, apply the material according to pot-life condition.

Pot-Life: 20-30 minutes at 77°F; (Note: Longer pot-life is observed at cooler temperatures.) End of pot-life nears when viscosity thickens and begins to sag during application.

PRODUCT APPLICATION:

The material can be brushed, rolled, or sprayed onto the substrate. For spray applications, the product can be both applied either by spray atomization or airless techniques. Please begin with recommended spray pressure application and optimize when desired coating is achieved when using either fan or cone tips.

Airless or Assisted Air Sprayers: Select appropriate equipment capable to set pump ratio at 30:1 or higher, material supply line of ½" ID and air line of 3/8" ID, and minimum atomizing pressure of 2,000 PSI. The minimum suggested tip-size to use 0.023" up to 0.035" The spray unit must be cleaned as soon as possible immediately after use with regular cleaning solvent, such as Methyl Ethyl Ketone (MEK) or Acetone for effective cleaning.

Conventional Sprayers: Select appropriate equipment with regulator and air gages, material supply line of ½" ID and air line of 3/8" ID, and air supply line of 80 to 100 PSI. The minimum suggested tip-size to use 0.070" or larger. Maintain enough air pressure to keep fluid pressure low to deliver good spray-ability and coverage on every pass. The spray unit must be cleaned as soon as possible immediately after use with regular cleaning solvent, such as Methyl Ethyl Ketone (MEK) or Acetone for effective cleaning.

Roller and Brush: Use synthetic materials (solvent resistant), 3/8" – 3/4"nap rollers, and medium to heavy bristles for brushes. Maintain consistent stroke application, preferably in one direction for uniformity, several or multiple coats of brushing and rolling maybe necessary to achieve desired dry-film thickness.

SAFETY, STORAGE AND DISPOSSAL:

This product is intended for use by professionals or trained individuals and must be familiar with the Safety Data Sheet (SDS). The product must be stored in a cool and dry place, always seal container after using. The shelf-life of the "unmixed" resin products are 2-year at 77°F storage condition and could be longer on less humid conditions.

Avoid the material from freezing and seal tight all containers. Empty containers must be disposed of according to your local city, state, and federal guidelines. Do not throw liquid portions to any drains, avoid spills, and always protect the environment.

PACKAGING:

The product is available in 5-gal filled containers of full or kits only of Part A & B.

TECHNICAL SUPPORT:

Technical service support is available to answer any questions regarding other product performance characteristics, safety, and product application with no obligation. Please call (951) 413-0240 and ask for Technical Service Support. 8AM – 5PM, PST.

DISCLAIMER:

The information and recommendations made are on our own studies and research that are believed to be accurate. However, no guarantee of their accuracy is given mainly due to various variations caused by actual application and substrate conditions the material is used. The customer / contractor must conduct their own appropriate testing to ensure compatibility, and suitability for all its intended use.