

CoatMasters®

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TECHNICAL DATA SHEET

PRODUCT DESCRIPTION:

CM 5007 NSC-AG (“3-Product Coating System”) is a new generation of nano-based hybrid polymer coating designed for “Permanent Anti-Graffiti” protection. An ultra-low VOC and air district compliant waterbased product used in combination with other proprietary low VOC coatings, which increases and improves overall durability and long-term film-coating protection of various surfaces, such as concrete, wood, and steel. The CoatMasters CM5007 Non-Sacrificial Coating (NSC) systems is designed to provide the highest performance in graffiti protection, combined with value adding multi-functional properties for an ideal desired finish. The system can be supplied to provide a final finish on either Matte or Gloss levels and can also be supplied on either Clear or Tinted color.

CM5007 NSC-AG is applied on a two to three-step coating process, which add layers of unique functional properties of hydrophobic and oleophobic film properties. These unique film characteristics enhances the superior level of protection from various type of graffiti and/or caused by foreign contaminants, making it one of the most versatile protective coating systems for use on any surface conditions, such as porous, semi-porous, or non-porous type surfaces.

Surface type: Concrete, Cementitious Stucco, Composites (i.e. High-Density Boards), and Wood
For absorptive and/or porous horizontal or vertical surfaces, the following coating system applies.

CM5007-NSC-AG (System 1) Matte or Gloss

CM5007 SIL-1 Precoat

CM5007 Base Coat

CM5007 Urethane Finish Coat (Matte or Gloss)

Surface type: Highly Dense Concrete, Polished Cementitious Surfaces use CM5007 LIT-2 as optional precoat to seal micro-surfaces. (Note: For steel, DO NOT USE any Precoat)

CM5007-NSC-AG (System 2) Matte or Gloss

CM5007 LIT-2 Precoat (optional) apply only for new (uncoated concrete or cementitious) finish surfaces

CM5007 Base Coat

CM5007 Urethane Finish Coat (Matte or Gloss)

CM 5007 NSC-AG can be power washed for easy graffiti removal, in addition to EPA or exempt solvent cleaning. The system is subject to **ASTM 7089-06** for best results we recommend use of our proprietary graffiti remover, please see additional instructions for recommended graffiti removal with aid of power washing equipment meeting **ASTM 6578M-13** for cleanability levels. The recommended pressure will depend on the nature of the surface (porous and non-porous) and degree of graffiti to be removed. The results may vary during the cleaning process. IMRAE supplies graffiti cleaners compatible with CM 5007 NSC-AG, please contact the Technical Service Group for assistance.

This entire water-based system is suitable for use on various grades and types of substrates, ideal for treating porous and non-porous building materials of newly constructed, rehabilitated, or restored type conditions.

TECHNICAL DATA:

CM5007-NSC-AG (Systems)

Physical Properties	CM5007 SIL – System 1 (Precoat)	CM5007 LIT System 2 (Precoat)	CM5007 System 1 & 2 (Base Coat)	CM 5007 Urethane System 1 & 2 (Finish Coat)
Liquid Appearance	Opaque White	Opaque White	White Milky	Part A: White / Part B: Clear
Specific Gravity	1.005	1.007	1.017	1.054 (Mixed)
pH	8.00 (Min)	8.00 (Min)	8.50 – 9.50	7.50 – 8.50
Solids by weight	7-15% Active	5-10 % Active	32%	55%
Regulatory VOC (grams/liter)	0 gm/li	0 gm/li	Max 45 gm/li	Max 20 gm/li

Freeze thaw limit stability: 0°C / 32°F

Shelf Life: 1-Year

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

Complies with all California Air Quality Management Districts (AQMD), which includes SDAPCD, SCAQMD, and BAAQMD for current VOC limits.

AREA COVERAGE:

Various substrates have different porosity conditions and estimated coverage spread for a gallon is based on actual typical usage. However, results may vary depending on actual porosity conditions of the substrate. The list below provides the estimated coverage in square feet (sq. ft.) for 1-gallon of each required product.

Coverage Rates (Square feet / gallon)	CM5007 SIL – System 1 (Precoat)	CM5007 LIT System 2 (Precoat)	CM5007 System 1 & 2 (Base Coat)	CM 5007 Urethane System 1 & 2 (Finish Coat)
Concrete (Dry Cast) Porous	100-150 sq.ft.	---	100-150 sq.ft.	200-300 sq.ft. per coat and for successive coats
Concrete (Wet Cast) Porous	125-175 sq.ft.	---	100-150 sq.ft.	
Concrete (Wet Cast) Polished	---	250-300 sq.ft.	200-250 sq.ft.	
CMU	100-150 sq.ft.	---	100-150 sq.ft.	
Exterior Plaster	100-150 sq.ft.	---	100-150 sq.ft.	
GFRC (Glass Fiber & Polymer)	150-200 sq.ft.	150-200 sq.ft.	100-150 sq.ft.	
High-Density Fiber Cement	200-250 sq.ft.	200-250 sq.ft.	150-200 sq.ft.	
Masonry (Joints and Seals)	100-150 sq.ft.	---	150-200 sq.ft.	
Natural Stone	80-100 sq.ft.	---	100-150 sq.ft.	
Stucco (Porous)	100-150 sq.ft.	---	100-150 sq.ft.	
Stucco (Painted)	150-200 sq.ft.	---	100-150 sq.ft.	
Split-face Block	100-150 sq.ft.	---	100-150 sq.ft.	
Terracota	150-200 sq.ft.	---	150-200 sq.ft.	
Wood	100-150 sq.ft.	---	150-200 sq.ft.	
Steel	---	---	150-200 sq.ft.	

SURFACE PREPARATION:

In general, the surface to be applied must be free from dirt or any type of foreign materials that will impair bonding onto the substrate. All types of concrete and/or other cementitious mixes must complete a 28-day cure time or have no more than 15% of moisture content, prior to coating. For best results, all surfaces should be clean or pressure washed as needed, and/or subjected to SSPC surface preparation techniques to ensure adequate adhesion, and corrosion resistance for exposed steel surfaces prior to start of any coating.

Use of material requires knowledge of standard safety practices and good protection for areas being applied, keep children and pets away from the work area. Maintain good air ventilation if used indoors. The material is ideally applied in fairly-ambient temperatures from 50 - 90 °F. Do not apply CM5007 Urethane when anticipated warmer conditions occurs above 90 °F or are expected during the final coating. The entire system is not recommended to be applied on temperatures below or near freezing temperatures 32°F (0°C), as this will cause the liquid to freeze, thicken, and/or delay cure times.

PRODUCT APPLICATION:

For spray applications, the products can be applied by roller, spray atomization, or airless techniques. Always observe coating film-dry properties and spray application technique during and between coats, according to relative ambient conditions. Apply the necessary number of coats according to established parameters below, to ensure attainment of an acceptable and/or approved final surface appearance.

GRACO (Airless Application) Tip Size: Std 517	CM5007 SIL System 1 (Precoat)	CM5007 LIT System 2 (Precoat)	CM5007 System 1 & 2 (Base Coat)	CM 5007 Urethane System 1 & 2 (Finish Coat)
Mixing (Before Use)	Not required	Not required	Yes Agitate contents	Yes Mix Part A & B
Pot-Life	---	---	24-hours	3-hours
Wet / Wet (Spray and Roll)	Allowed	Allowed	NOT Allowed	NOT Allowed
Recoat- time between coats	No limit	No limit	Min 15 min or DTT	Min 2-hrs or DTT
Dry hard	1 hour	1 hour	4-6 hours	8-10 hours
Dry through	4 hours	4 hours	10-12 hours	24 hours
DFT minimum (min)	1-2 mils	1-2 mils	2-3 mils	3-4 mils
Number of coats (min)	1 (saturated)	1 (saturated)	1-2 (pin-hole free)	2 (shield)

Always maintain good saturation of the substrate, depending on the porosity additional coatings may be needed to ensure adequate and even coverage. Do no over coat when material overruns the substrate, this is a sign of saturation.

STORAGE AND DISPOSAL:

All products must be stored in a cool and dry place, always seal container after using. The shelf-life of the product is at least 1-year in 77°F storage condition, and longer depending on conditions. Avoid the material from freezing, and before using mix the product thoroughly until homogenous in appearance. Empty containers must be disposed 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 is available only in certain packaging on 5-gallon pails and 55-gallon drums. Please contact our Customer Service Support group for more information.

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 8 AM – 5 PM 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 due to substrate conditions. The customer must conduct their own appropriate testing to ensure compatibility, and suitability for all its intended use and purposes.