KELLY-MOORE PAINTS
INDUSTRIAL COATINGS
HIGH PERFORMANCE SYSTEMS

KM-399

High Build Gloss Polyurethane Enamel

THIS PRODUCT MAY NOT BE AVAILABLE IN SOME AREAS DUE TO VOC REGULATIONS
Contact your Kelly-Moore representative for more information

Product Description

A two component, high build acrylic aliphatic isocyanate coating with excellent gloss and color retention. KM-399 cures to an extremely durable, abrasion resistant film with exceptional exterior durability, chalk resistance, color stability, and long term gloss retention. KM-399 has a tile-like finish which is very tough but yet a flexible film. KM-399 is ideal for use in industrial and chemical environments. KM-399 has a low V.O.C. at 249 GMS/Liter.

Performance Features

- **Excellent Gloss & Color Retention**
- **High Solids & High Film Build**
- **Non-Chalking, Non-Yellowing**
- **Highly Resistant to Abrasion & Impact**
- **Tile-like Finish**

Product Specifications

Resin Type	Acrylic Aliphatic Isocyanate Polyurethane
Color Range	White & Tint Bases
Finish	High Gloss
Drying Time	See chart - page 3
Practical Coverage	200-500 Sq. Ft. / Gallon
Recommended Dry Film Thickness	2 - 5 mils per coat
Solids By Volume	63% ±2%
Mixing Ratio	4:1 by volume 4 parts Base A: 1 part Hardener B
Pot Life	4-6 hours @ 75°F.
Sizes	5 Gallon & 1 Gallon kits
V.O.C.	249 Grams per liter (white)
Thinner	KM-SU-95 Reducer
Clean Up	KM-SU-95 Reducer

Surface Preparation

WARNING! If you scrape, sand or remove old paint from any surface, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Carefully clean up with a wet mop or HEPA vacuum. Before you start, find out how to protect yourself and your family by contacting the U.S. EPA/Lead Information Hotline at 1-800-424-LEAD (5323) or log on to www.epa.gov/lead.

Surface Preparation:

KM-399 Polyurethane Enamel is a top coat and is not recommended directly over unprimed surfaces. Apply over appropriate primers or intermediate coats. Surfaces must be free from all oil, grease, dirt, water, or other foreign matter. KM-399 is not recommended for immersion service.

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 matter. If previous service has left surface deposits of chemicals, they also must be removed by pressure washing and followed by a thorough water rinsing. Remove all rust, mill scale, loose paint, and any previous existing coatings by dry abrasive blasting all steel surfaces before applying the coating system. Recommended primers for the KM-399 are KM-15 Chemical Mastic Epoxy, KM-636 Low Temp Epoxy or KM-100 MCU Aluminum. Follow the recommended recoat time per label instructions. In some cases an intermediate coat may need to be applied when a 3 coat system is necessary.

Galvanized, Aluminum & Non-Ferrous Metals:

Degrease and chemically clean surfaces in accordance with SSPC-SP1 Solvent Cleaning Specification. The surface should be sweep blasted and primed with KM-15 Epoxy or KM-100 MCU Aluminum.

Inorganic Zinc:

Allow 24 hours cure before recoating Inorganic Zinc. Apply Zinc over "Near-White Blast" (SSPC-SP10) or White Blast (SSPC-SP5.) Apply Zinc at 2 1/2 - 3 mils DFT. After the 24 hours cure time, apply a mist coat of KM-15 Epoxy. Let the mist coat tack and spray a full coat of KM-15 at 2-3 mils dry. Allow 8 hours recoat time at 75°F before applying KM-399 High Build Polyurethane.

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Marginally Prepared Steel Surfaces:
Degrease and chemically clean surfaces in accordance to SSPC-SP1 Solvent Cleaning spec to remove all oils, grease, and other soluble contaminants. If steel is chemically contaminated (e.g. acid, caustic, or salts), high pressure water cleaning at a minimum of 5,000 psi is recommended to remove chemicals. The pH of steel should be tested to insure that surface of steel is between 7.0-8.5 pH. After the above process has been completed, power tool cleaning is to be done. Power tool clean to remove all mill scale, loose rust, loose paint and other detrimental foreign matter. Apply two coats KM-100 MCU Aluminum at 2-3 mils DFT. Minimum recoat time for KM-100 is two (2) hours, maximum recoat time is twenty-four (24) hours at 75°F and 50% relative humidity. KM-15 Chemical Mastic may also be used as a primer under the KM-399 High Build Polyurethane on marginally prepared surfaces.

Concrete/Masonry Surfaces:
New concrete must be cured a minimum of twenty-eight (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. Voids, cavities, spalled areas, and other structural defects should be trowel-grouted smooth with an appropriate compound. Rub smooth with a hand grinding stone any burrs or high protruding aggregate left uneven by troweling. Consult Kelly-Moore Paint regarding the testing of the concrete for proper pH, vapor testing and surface porosity. Acceptable primers for the KM-399 Polyurethane are KM-155 or KM-1703 Epoxy Concrete Primers. An Epoxy Intermediate coat may be needed if higher film build is necessary to protect against abrasion, impact or heavy traffic. Products such as KM-15 can be used. KM-399 is not designed for forklift and other heavy trafficked areas.

Mixing Instructions:
Stir each component to a uniform consistency, using a slow speed, explosion proof, variable speed drill with a Jiffy mixer. Make sure any pigment settled to the bottom is incorporated. Do not vary proportions. KM-399 is prepared by mixing 4 parts Base (Part A) to 1 part KM-300-002 Acrylic Polyurethane Hardener (Part B) with the power mixer.

Pot Life: The Pot life of KM-399 is 4-6 hours at 75°F.

Application Procedure
Best method of application is conventional or airless spray. Use up to 10% KM-SU-95 Reducer. Flush equipment thoroughly with MEK solvent before using and use a moisture trap on the air supply.

Airless	**Graco**	**Binks**
Gun	205-591	Model 500
Pump	Bulldog 30:1	Mercury 5C-30:1
Tip Range	.011 to .015	.011 to .015
Hose	3/8 inch I.D	3/8 inch I.D.
Pressure	2000-2500 psi	2000-2500 psi

Conventional	**DeVilbiss**	**Binks**
Gun	MBC or JCA	#18 or #62
Fluid Tip	E	66
Air Cap	704 or 765	66PE
Atomizing Pressure	60 psi	60 psi
Pot Pressure	15-20 psi	15-20 psi
Hose	1/2 inch I.D.	1/2 inch I.D.

When spraying, use a 50% overlapping crosshatch pattern to minimize the occurrence of pinholes. Do not apply to surfaces below 50°F or above 120°F. Do not apply over dew or frost. The surface should be dry and at least 5°F above the dew point.

Rolling: Thin up to 10% by volume with KM-SU-95 Reducer, depending on temperature. Use a short nap phenolic mohair roller cover. Roll in the same direction always keeping a wet edge. Do not over roll product.

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Dry Times

Temp.	Tack Free	Min. Recoat	Max. Recoat
90° F	1 hour	6 hours	1 day
75° F	2 hours	8 hours	2 days
50° F	4-6 hours	24 hours	4 days

Times may be longer for thickness above 2.5 dry mils. For safety and proper product curing, good ventilation is necessary when painting indoors or in confined areas. Be sure the batch numbers are all the same to provide uniform color. Heaters that emit carbon dioxide and carbon monoxide can cause the coating to yellow.

Precautions

KM-399 is flammable. Keep away from all sources of ignition during mixing, application and cure. Contains Aliphatic Polyisocyanates, N-Butyl Acetate, PCBTF, MEK, Ester Solvent, Aromatic Hydrocarbons and PM Acetate. The HARDENER (Part B) and mixtures of BASE (Part A) with HARDENER(Part B) can cause eye and skin burns as well as allergic reactions. The use of goggles, fresh air masks or NIOSH approved respirators, protective skin cream and protective clothing is a recommended standard practice when spraying.

Proper Disposal

For proper disposal of excess material, please contact your local city or county waste management agency.

Limited Warranty: The statements made on this bulletin, product labels or by any of our agents concerning this material are given for information only. They are believed to be true and accurate and are intended to provide a guide to approved construction practices and materials. As workmanship, weather, construction equipment, quality of other materials and other variables affecting results are all beyond our control, Kelly-Moore Paint Company, Inc., does not make nor does it authorize any agent or representative to make any warranty of MERCHANTABILITY OR FITNESS for any purpose or any other warranty, guarantee or representation, expressed or implied, concerning this material except that it conforms to Kelly-Moore's quality control standards. Any liability whatsoever of Kelly-Moore Paint Company, Inc. to the buyer or user of this product is limited to the purchaser's cost of the product itself.

SEE MATERIAL SAFETY DATA SHEETS FOR FULL SAFETY PRECAUTIONS.

KM-399 IS FOR PROFESSIONAL USE ONLY.

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KEEP AWAY FROM CHILDREN