

# KELLY-MOORE PAINT COMPANY, INC.



## KM-375 GULF-THANE HIGH SOLIDS, HIGH BUILD POLYURETHANE

### PRODUCT DESCRIPTION

A two component, High Solids, High Build acrylic aliphatic isocyanate polyurethane coating with excellent gloss and color retention. KM-375 cures to a very tough, abrasive resistant film with exceptional exterior durability, chalk resistance, color stability, and long term gloss retention. KM-375 has a tile-like finish which is a very tough and has a flexible film. KM-375 has a very low V.O.C. under 250 GMS/L.

### PRODUCT FEATURES

1. High solids.
2. V.O.C Compliant.
3. Good chemical and stain resistance.
4. Excellent gloss and color retention.
5. Non-chalking and non-yellowing.
6. A tile-like finish.
7. Easy to clean.
8. Highly resistant to abrasion and impact.
9. Outstanding wearing properties.
10. High film build.

### TECHNICAL DATA

**COLORS:** Industrial Colors, Deep Base, Neutral Base

**CLEAN UP:** KM-SU-95

**GLOSS:** High Gloss

**POT LIFE:** @ 75°F 4-6 hours

**<sup>1</sup>VOLUME SOLIDS:** 61% ± 2% (white)

**RECOAT TIME:** @ 75°F 8-48 hours

**COVERAGE** (Theoretical): 976 sq. ft. @ 1.0 mil DFT

**APPLICATION:** Conventional, airless spray, roll or brush

**RECOMMENDED FILM THICKNESS:** 2.0-5.0 dry mils per coat 195-488 sq. ft. per gallon

**APPLICATION TEMPERATURE:** 45°F-120°F

**MIXING RATIO:** 4:1 by volume. Mix 4 parts Base (Part A) to 1 part Hardener (Part B)

**DRY SERVICE TEMPERATURE:** 250°F

**INDUCTION TIME:** None

**SHELF LIFE:** 1 year minimum

**THINNING:** KM-SU-95 V.O.C. Reducer

**PACKAGING:** 5 gal units and 1 gal units

**<sup>1</sup>V.O.C.:** 2.07 lbs/gallon or 248 GMS/Liter

<sup>1</sup>Values are listed for white, other colors may vary slightly

### PRODUCT USES

Ideal as a top coat for storage tanks, vessels, water towers, oil rigs, structural steel, equipment, pipe lines and racks, exterior buildings, in chemical processing plants, pulp and paper mills, sewage and waste water treatment facilities, fertilizer plants, petroleum refineries, electric generating stations, coal handling operations, marine installations, etc.

## SURFACE PREPARATION

KM-375 Polyurethane is a top coat and is not recommended for use 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-375 is not recommended for immersion service.

### 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 matter. If previous service has left surface deposits of chemicals, they must be removed by pressure washing, 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-375 are KM-15 Chemical Mastic and KM-100 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.

### b. Aluminum, Galvanized Steel and 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 or KM-100 Aluminum. Recoat time is minimum 8 hours for KM-15 and KM-100 is 2-6 hours at 75° before applying KM-375 High Build Polyurethane.

### c. Zinc Rich Primer

Sand blast to a SSPC-SP10 "near white" blast or SSPC-SP6 "commercial" blast. Apply KM-MCU-104 at 2.5 to 3.5 mil DFT. Allow a minimum of 4-5 hours recoat time @ 75°F and 50% R.H before applying KM-375 High Build Polyurethane. For best results, apply an intermediate coat of KM-15.

### d. Marginally Prepared Steel Surface

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 of KM-100 Aluminum at 2-3 mils DFT. Minimum recoat time for KM-100 is two (2) hours, maximum recoat time is six (6) hours at 75°F and 50% relative humidity. KM-15 Epoxy may also be used as a primer under the KM-375 High Build Polyurethane on marginally prepared surfaces.

### e. Concrete/Masonry Surfaces

New concrete must be cured at least 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.

# KELLY-MOORE PAINT COMPANY, INC.

KM-375/page 3

Voids, cavities, spalled areas, and other structural defects should be trowel-grouted smooth with KM-CF-615 Epoxy Crack Filler or KM-PC-1000 Epoxy Mortar. Rub smooth with a hand grinding stone any burrs or high protruding aggregate left uneven by troweling. Consult Gulf Coast Paint regarding the testing of the concrete for proper pH, vapor testing and surface porosity. Acceptable primer for the KM-375 Polyurethane is the KM-15.

## MIXING INSTRUCTIONS

Stir each component to a uniform consistency, using an explosion proof variable speed drill with a Jiffy mixer. Make sure any pigment settled to the bottom is incorporated. Do not vary proportions. KM-375 is prepared by mixing 4 parts Base (Part A) to 1 part Hardener (Part B) with the power mixer. KM-375 may be thinned up to 10% with KM-SU-95 VOC thinner.

## V.O.C.

Unthinned  
2.07 lbs/gl  
(248 gms/liter)

Thinned 5% (KM-SU-95)  
2.45 lbs/gl  
(294 gms/liter)

Thinned 10% (KM-SU-95)  
2.90 lbs/gl  
(347 gms/liter)

## APPLICATION PROCEDURE

Best method of application is conventional or airless spray use up to 10% Thinner. Flush equipment thoroughly with MEK solvent before using and use a moisture trap on the air supply.

### Airless Spray

Gun  
Pump  
Tip Range  
Hose  
Pressure  
Filter Size

### Graco

Silver Plus  
Xtreme 33:1  
.013 - .017  
3/8 inch I.D  
2000-2500 psi  
60 Mesh

### Conventional Spray

Gun  
Fluid Tip  
Air Cap  
Atomizing Pressure  
Fluid Pressure  
Hose

### DeVilbiss

MBC or JGA  
E or F  
704 or 777  
50-60 psi  
15-25 psi  
3/8 inch ID

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 temperature should be at least 5°F above the dew point.

**Roller** – Thin up to 10% by volume with KM-SU-95 V.O.C. Reducer, depending on temperature. Use a 1/4" – 3/8" short nap phenolic core, shed resistant roller cover. Roll in the same direction always keeping a wet edge. Do not over roll product.

**Brush** – Use pure bristle brush.

## CURE TIME

<u>TEMPERATURE</u>	<u>TACK FREE</u>	<u>MINIMUM RECOAT</u>	<u>MAXIMUM RECOAT</u>
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

# KELLY-MOORE PAINT COMPANY, INC.

KM-375/page 4

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.

## CAUTIONS

KM-375 is flammable. Keep away from all sources of ignition during mixing, application and cure. Contains Aliphatic Polyisocyanates, N-Butyl Acetate, Aromatic Solvent, PCBTF and MEK. 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. This product is sold without warranty as to performance expressed or implied. Users are urged to make their own tests to determine the suitability for their particular conditions.

**SEE SAFETY DATA SHEET FOR FULL SAFETY PRECAUTIONS  
FOR PROFESSIONAL AND INDUSTRIAL USE ONLY  
KEEP AWAY FROM CHILDREN. NOT FOR RESIDENTIAL USE**

Technical Bulletin KM-375  
Rev. 02/2023