

# MCU 45 (400 VOC)

PRODUCT CODE: 005-M4540

## VOC COMPLIANT ONE COMPONENT MOISTURE CURED URETHANE

### PRODUCT DESCRIPTION

**MCU 45 (400 VOC)** is a Non-Yellowing, one component, low viscosity, moisture cured urethane. This product provides an extremely tough and durable film. It has a UV Absorber incorporated which makes it an excellent coating for interior and exterior use.

### BENEFITS/FEATURES

- ◆ Provides high gloss, abrasion resistant finish
- ◆ Superior UV stability outperforms many similar products on today's market
- ◆ Easy to use one component system

### RECOMMENDED APPLICATIONS

**MCU 45 (400 VOC)** is recommended for use on interior or exterior concrete surfaces in commercial, retail, and high traffic areas. Aggregate glazes, decorative concrete and slip resistant finishes.

### TECHNICAL INFORMATION

Abrasion Resistance.....	< 35 mg loss	VOC.....	< 400 grams/liter
<small>(Tabler Index, ASTM 4060-81, CS-17 Abrasion Wheel, 1000 gram load)</small>		Coverage (3 mils drf.).....	280 - 330 sq. ft./ga
Gloss 60°.....	92	Viscosity.....	Low
Elongation (ASTM D882-67).....	4.9 - 7.0%	Usable time in opened container.....	Approx. 45 Minutes
Flexibility (1/8" Mandrel).....	Pass	Dry Time-Set to Touch (50% R.H. @ 72° F).....	4-6 hours
Hardness (7 days).....	5H - 6H	Dry Time-Recoat (50% R.H. @ 72° F).....	See instructions for use
Heat Resistance.....	300° F	Dry Time-Light Traffic (50% R.H. @ 72° F).....	24 hours
Water Resistance.....	Excellent	Dry Time-Cure (50% R.H. @ 72° F).....	72 hours
Solids % Weight (Federal Spec. TTP-141B).....	45%	Dry Time-Full Cure (50% R.H. @ 72° F).....	7 days
Density lbs/Ga. (Federal Spec. TTP-141B).....	8.2	Flash Point.....	62 F

#### CHEMICAL & STAIN RESISTANCE (ASTM D- 1308 24 HOUR IMMERSION)

Wine	No Effect	Urine	No Effect
Gasoline	No Effect	Motor Oil	No Effect
Brake Fluid	No Effect	Transmission Fluid	No Effect
Skydrol	No Effect	10% Sulphuric Acid	No Effect
10% Hydrochloric Acid	No Effect	10% Acetic Acid	No Effect
Xylene	No Effect	MEK	No Effect

### APPROXIMATE COVERAGE RATES

<b>Application Surface</b>	<b>First Coat</b>
New (unsealed) concrete	280-330 ft <sup>2</sup>

\*Coverage rates vary depending upon surface porosity and texture, and application method. Excessive build up should be avoided.

\*\*Please refer to application instructions for proper application of second coat.

### SHELF LIFE

**MCU 45 (400 VOC)** has a shelf life of up to 6 months in it's original, sealed, unopened container.

### PACKAGING

**MCU 45 (400 VOC)** is packaged in 1 gallon and 5 gallon containers.



#### SURFACE KOATINGS, INC.

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EPOXIES, URETHANES, ETC.

MCU 45 (400 VOC)

## INSTRUCTIONS FOR USE

### **SURFACE PREPARATION:**

*New Concrete:* Acid etch evenly with a solution of 1 part commercial muriatic acid to 3 - 4 parts clean water (by volume) and rinse thoroughly with our **Balance** neutralizer, or a neutralizing solution of 1 cup ammonia to 5 gallons clean water to achieve a neutral substrate of 7 pH. Allow surface to dry completely prior to coating application. **Light shotblasting or diamond grinding is suggested for superior adhesion.**

**Coated Concrete:** An existing coating must be completely removed prior to applying new product or a thorough sanding or other mechanical grinding is highly recommended to prepare the surface if applying over an existing coating. After existing coating is removed or sanded and prepared a test area coat is highly recommended to test adhesion prior to entire application.

Substrate temperature should be no less than 55 degrees F and not exceed 80 degrees F. Avoid applying coating in high humidity/moisture atmospheres. If applied outside these limits the coating may not achieve adequate film formation and may have excessive air entrapment, bubbles, blushing or hazing.

**MIXING:** Do not incorporate air while mixing. Light hand mixing with a hand held stir stick only for 10 - 15 seconds if necessary.

**CAUTION:** Moisture cure finishes cure by absorbing moisture from the atmosphere and then hardening. If the container is open for any period of time or brushes or rollers are dipped in and out, then the contents are likely to go solid. Partially filled containers are also likely to go solid over a period of time. Pour out only what will be used up in the immediate time frame and reseal the original container each time after pouring product out.

**APPLICATION:** It is recommended to apply this coating using a 3/8"-1/2" shed-free, phenolic core roller. Apply evenly at a rate of 280-330 square feet per gallon, always keeping a wet edge. Back rolling may be necessary to achieve a uniform, roller mark free application. It is recommended to work in sections usually using control joints as dividers to ensure proper application results. Do not allow to puddle. Use a bristle brush to remove excess coating in joints.

**SECOND COAT:** If a second coat is necessary, allow the first coat to cure thoroughly then sand or screen the entire surface. Apply a thin coat of 250 HP Cyclo Epoxy for inter coat adhesion. After the epoxy has completely cured, apply the second coat at the same rate as the first coat.

**PLEASE NOTE:** It is always recommended to test the product in a small, inconspicuous area (on the same concrete substrate) for desired results prior to application. Coverage rates may vary for all coatings and substrates depending on porosity, density, texture etc.

## CLEAN-UP

Use Acetone or MEK. Dispose of containers in accordance with local and federal regulations.

## PRODUCT REMOVAL

Dried, cured urethane may be removed with a commercial stripper, but recommended removal is by way of mechanical means, including sanding, shotblasting, etc.

## PRECAUTIONS AND LIMITATIONS

- ▶ **MCU 45 (400 VOC)** will not freeze during storage, however, allow temperature to rise to a minimum 60 degrees F prior to application.
- ▶ All HVAC ventilation ducts should be somehow blocked prior to application so solvents fumes are not distributed.
- ▶ Keep away from open flames. **MCU 45 (400 VOC)** is flammable and is very susceptible to ignition.
- ▶ It is not recommended to apply **MCU 45 (400 VOC)** over existing coatings unless tests are performed and accepted.
- ▶ Coverage rates depend upon many conditions including application method, surface porosity, applicator, ect.
- ▶ **MCU 45 (400 VOC)** should be applied in medium to thin coats. Do not puddle.
- ▶ Be aware that this product may be slippery when wet. Anti Slip additive may be needed to reduce surface slip hazards.
- ▶ **MCU 45 (400 VOC)** contains harsh vapors. Adequate ventilation and proper respiratory protection is necessary.
- ▶ Do not apply **MCU 45 (400 VOC)** over wet or damp surfaces. Moisture tests may be necessary prior to application.

## SPECIAL NOTES

Please consult Material Safety Data Sheet (MSDS) and read Warranty information prior to use. This information can be requested by contacting customer service at 615-323-9461.

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