

Excel-Thane "MCU-250 & 400"

Data Sheet

Moisture Cured Urethane Maintenance Coatings

PRODUCT:

EXCEL-THANE "MCU-250" and "MCU-400" CLEAR are single component, moisture cured, abrasion-resisting and stain-resisting polyurethane sealers for decorative concrete. It is based on an aliphatic (non-yellowing) isocyanate with a polyester backbone. EXCEL-THANE "MCU-250" and "MCU-400" CLEAR have a high gloss finish upon curing.

FEATURES:

Composition: Single component, solvent borne, clear, high performance, moisture cured polyurethanes. EXCEL-THANE "MCU-250" and "MCU-400" CLEAR cure to yield a high gloss finish in order to maximize stain resistance. The physical properties of cured EXCEL-THANE "MCU-250" and "MCU-400" CLEAR are effective for extended periods of exterior exposure.

Basic Uses: EXCEL-THANE "MCU-250" and "MCU-400" CLEAR are designed to coat decorative concrete or concrete with decorative or natural aggregates. When applied at the proper thickness, these high solids and high performance sealers will minimize dirt and oil penetration. It is easily cleaned with water and detergent and provides a high gloss, bright appearance. EXCEL-THANE "MCU-250" and "MCU-400" CLEAR are extremely wear resistant compared to conventional sealers and coatings. They are resistant to most commonly encountered dilute acids, alkalis, organic solvents and oils as well as many dry chemicals. EXCEL-THANE "MCU-250" and "MCU-400" CLEAR are used as a topcoat in Excellent Coatings Decorative Aggregate Concrete Surfacing Systems. They will brighten an exposed aggregate, highlighting the color of the aggregate. In other areas where solvent containing coatings are allowed, these coatings are clear dress up top coats for other ECI Pedestrian Traffic Waterproofing Systems.

Limitations: Containers that have been opened must be used within one or two days, since the product is a moisture-reactive material that will gel or set up when exposed to air. Keep lid tightly sealed when material is not in use. ***This material contains flammable and combustible solvents.***

EXCEL-THANE "MCU-250" and "MCU-400" CLEAR cure faster when applied under warm temperature and high humidity conditions and slower when applied under cool temperature and low humidity conditions.

Shelf life: Twelve (12) months after manufacture when continuously stored indoors in the original unopened metal containers at temperatures under 80°F.

INSTALLATION:

Surface Preparation: All surfaces to be coated must be clean, dry and free of all contaminants. It is recommended that concrete be cleaned by sandblasting or mechanically grinding. Metal surfaces must have no oxidation present prior to coating. Ceramic tile should be degreased and stripped to remove any wax on the surface and possibly sanded. Wood and aggregate should be cleaned with a detergent and rinsed with water under high pressure and allowed to dry. The appropriate primer or base coats should be used in all cases.

Caution: Cured EXCEL-THANE "MCU-250" and "MCU-400" CLEAR may be slippery and may require the use of skid-resisting or texturing aggregate.

Application: EXCEL-THANE "MCU-250" and "MCU-400" CLEAR shall be spray, roller, or brush applied in two (2) coats at a rate of 200 square feet per gallon per coat in order to yield an 8 mil average dry film thickness. EPA approved zero VOC urethane grade solvents may be used to reduce the viscosity and increase penetration into concrete. Additional coats may be applied after an overnight cure, but no later than 16 hours after initial application. The completed coating system should not be subjected to any heavy pedestrian traffic during the first 48 hours after application is completed. In certain applications, where a rapid cure may be desirable, Excellent Coatings Accelerators may be added to dramatically reduce cure time. Do not proceed with application of materials when surface temperature of the substrate to be coated is less than 45°F.

TECHNICAL SERVICE:

Technical Assistance is available by contacting:

EXCELLENT COATINGS INTERNATIONAL
10880 Poplar Avenue Fontana, California 92337
Phone: (909) 823-8800
Fax: (909) 823-6309

PRECAUTIONS:

Before using this product read the container precautionary label and SDS sheet carefully. Personnel applying the coating should wear protective clothing and gloves, avoid contact of material with skin or eyes, and avoid breathing vapors. Mix and apply in well ventilated areas and observe normal safety precautions. Keep materials away from heat, sparks, and flames. Do not allow use of spark producing equipment during application and until all solvent vapors are gone. Post "No Smoking" signs. Store materials in a dry place at temperatures between 50°F and 85°F. THIS PRODUCT IS FOR PROFESSIONAL USE ONLY.

LIMITED WARRANTY:

Excellent Coatings International (ECI) warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any ECI materials prove to contain manufacturing defects that substantially effect their performance, ECI will, at its option, replace the materials or refund its purchase price.

This limited warranty is the only warranty extended by ECI with respect to its materials. There are no other warranties, including the implied warranties of merchantability and fitness for a particular purpose. ECI specifically disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever.

The dollar value of ECI's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the ECI material in question.

TECHNICAL DATA:**EXCEL-THANE "MCU-250" and "MCU-400" CONCRETE MAINTENANCE COATINGS**

PROPERTY	TYPE EXCEL-THANE "MCU-250" (400 VOC)	TYPE EXCEL-THANE "MCU-250" (250 VOC)	ASTM TEST METHOD
Solids Content (By Volume)	53 ± 2%	53 ± 2%	D-1353-78
VOC Content	400 grams/liter	250 grams/liter	Calculated
Weight Per Gallon	8.6 ± 0.2 lbs.	9.8 ± 0.2 lbs.	D-1475-60
Viscosity @ 77°F	500-700 cps	500-700 cps	D-2393-80
Cure Time @ 77°F, 50% R.H. @ 5 mils	2 hours dry to touch 24 hours through cure	4 hours dry to touch 36 hours through cure	-----
Coverage, Sq. Ft., Per Gal. @ 8 mils (dry film)	100	100	
Flash Point	Above 82°F	Above 110°F	D-1310-82
Tensile Strength	5000 ± 500 psi	5000 ± 500 psi	D-412-80
Ultimate Elongation	175 ± 50%	175 ± 50%	D-412-68
Hardness, Shore A	90	90	-----
Moisture Vapor Transmission @ 10 mils	0.2 perms	0.2 perms	D-3389
Abrasion Resistance (inch loss)	Less than .001	Less than .001	C-502 Tabor Abrasion, 1000 Rev. with 1000 Gm. Weight, CS-17 wheel
Chemical Resistance (Commonly encountered dilute acids, salts, and oils)	Excellent	Excellent	D-543-67
Service Temperature Range	-30°F to 185°F	-30°F to 185°F	D-1349-78
Thermal Shock	No loss of adhesion	No loss of adhesion	Alternate Heat/Cold Cycle

ECI "MCU-250" and "MCU-400" (13)