



URETHANE MC 100™

HIGH SOLIDS POLYURETHANE TOP COAT MOISTURE CURE URETHANE

DESCRIPTION

URETHANE MC 100™ IS A SINGLE-COMPONENT MOISTURE-CURED ALIPHATIC POLYURETHANE TOPCOAT FOR CONCRETE FLOORS AND WALLS. THIS SYSTEM HAS AN EXTREMELY LOW ORDROR, CONTAINS NO VOC'S OR HAP'S, AND IS A UV LIGHT STABLE POLYURETHANE THAT WON'T CHALK OR TURN YELLOW WITH EXPOSURE TO SUNLIGHT. PROPERTIES INCLUDE EXCELLENT CHEMICAL RESISTANCE AGAINST ACIDS, BASES, OILS, AND ORGANIC SOLVENTS, AND HIGHER WEAR RESISTANCE THAN POLYASPARTIC, SOLVENT-BASED URETHANE, AND EPOXY COATINGS. THIS POLYURETHANE DEVELOPS A HARD, HIGH-GLOSS, WEAR-RESISTANT, FLEXIBLE FILM THAT CAN BE USED AS A CLEAR OR PIGMENTED TOPCOAT. A MATTE FINISH ADDITIVE IS AVAILABLE FOR A SATIN FINISH.

PRIMARY APPLICATIONS

- ✓ BREWERIES
- ✓ MANUFACTURING
- ✓ WAREHOUSES
- ✓ LABORATORIES
- ✓ CHEMICAL PLANTS
- ✓ AUTOMOTIVE REPAIR CENTERS
- ✓ DISTILLERIES
- ✓ LOCKER ROOMS AND RESTROOMS
- ✓ FIRE AND POLICE STATIONS
- ✓ OUTDOOR LOGOS/DECORATIVE CONCRETE
- ✓ AIRCRAFT HANGARS

ADVANTAGES

- ✓ SOLVENT-FREE, NO VOC'S OR HAP'S
- ✓ HIGH GLOSS, ODORLESS
- ✓ ONE-COMPONENT, NO MEASURING OR MIXING
- ✓ COVERAGE RATE: 500-700 SQFT/GAL
- ✓ ALIPHATIC, UV-STABLE, WILL NOT YELLOW
- ✓ EXCELLENT BALANCE OF PROPERTIES
- ✓ GREATLY ENHANCES ACID-STAINED CONCRETE
- ✓ CAN BE APPLIED OVER CONCRETE COUNTERTOPS
- ✓ COLOR PACKS AND MATTE FINISH AVAILABLE
- ✓ SHIPS DOT NON-HAZARDOUS
- ✓ HIGH CHEMICAL, MOLD AND FUNGUS RESISTANCE
- ✓ BETTER ABRASION RESISTANCE THAN POLYASPARCTICS, WEAR RESISTANCE, ELONGATION, TENSILE STRENGTH SOLVENT-BASED URETHANES AND EPOXIES



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TECHNICAL DATA

PACKAGING		COLOR		
1 GALLON		CLEAR	CLEAR	COLORED
RECOMMENED THICKNESS		GLOSS	SATIN	COLOR PACKS
CLEAR OR MATTE FINISH	1-3 MILS / 500-700 FT² GAL	SHELF LIFE 12 MONTHS IN ORIGINAL UNOPENED FACTORY SEALED CONTAINERS. KEEP AWAY FROM EXTREME COLD, HEAT, OR MOISTURE. KEEP OUT OF DIRECT SUNLIGHT AND AWAY FROM FIRE HAZARDS. DO NOT RE-USE PREVIOUSLY OPENED CONTAINERS.		
COLORED FINISH	3-4 MILS / 400-500 FT² GAL			
MIX RATIO BY VOLUME				
SINGLE COMPONENT – NO MIXING				
<i>*NOTE: THAT THE INDICATED MILEAGE IS CALCULATED FOR FLAT OR PRE-COATED SURFACES. A POROUS OR IMPERFECT SURFACE WILL REQUIRE MORE MATERIAL IN ORDER TO COVER THE SAME MILEAGE.</i>				
POT LIFE	VOC (G/LITRE)	VISCOSITY @ 72°		
45 MIN @ 72°	<1 G/L	GLOSS	MATTE	COLORED
SOLIDS BY WEIGHT %	RECOMMENDED THINNER	20-400 CPS	-	-
>99.9%	NONE	-	-	-
SUBSTRATE TEMPERATURE		72°		
RE-COAT TIME (MIN-MAX)		12-24 HRS	-	-
CURING DETAILS	TACK FREE	8-10 HRS	-	-
	LIGHT TRAFFIC	16-24 HRS	-	-
	FULL CURE	5 DAYS	-	-
<i>*NOTE: TIMES AND DATA MENTIONED ARE BASED ON LABORATORY CONDITIONS. FIELD RESULTS MAY VARY AND WILL BE AFFECTED BY CHANGING AMBIENT CONDITIONS, ESPECIALLY CHANGES IN TEMPERATURE AND RELATIVE HUMIDITY.</i>				

PHYSICAL PROPERTIES

ADHESION ASTM D4541	COEFFICIENT OF FRICTION ASTM D2047
490 PSI	>0.6
ELONGATION (%) ASTM D2370-98(10)	IMPACT RESISTANCE ASTM D-2794
40%	PASSES 160 IN. LB.
PENCIL HARDNESS ASTM D-3363	TENSILE STRENGTH (PSI) ASTM D2370-98(10)
4H+	3427 PSI
TABER ABRASION, ASTM D4060-14 (CS17 WHEEL/1 KG/1000 CYCLES)	60 DEGREE GLOSS ASTM D-523
9 MG LOSS	95+



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CHEMICAL RESISTANCE

R=RECOMMENDED LE=LIMITED EXPOSURE (REMOVE WITHIN 2 HRS) NR=NOT RECOMMENDED

MOTOR OIL	R	XYLENE	R	25% HYDROCHLORIC ACID	R
GASOLINE	R	ANILINE	R	MUSTARD	R
DIESEL FUEL	R	SKYDROL	R	KETCHUP	R
BRAKE FLUID	R	JET FUEL	R	RED WINE	R
ANTI-FREEZE	R	SALT WATER	R	URINE	R
HYDRAULIC FLUID	R	25% SULFURIC ACID	R	BLOOD	R
BRAKE CLEANER	R	25% ACETIC ACID	R	VINEGAR	R
IPA	R	10% NITRIC ACID	LE	IODINE	R
ACETONE	R	85% PHOSPHORIC ACID	LE	HOUSEHOLD BLEACH	R
MEK	R	10% HYDROGEN PEROXIDE	R	ALCOHOL	R

SURFACE PREPARATION

IF APPLYING OVER AN EXISTING COATING, THOROUGHLY SAND THE COATING WITH 120-220 GRIT SCREEN AND CLEAN TO ENSURE A STRONG BOND BETWEEN COATS. AFTER SANDING, VACUUM THOROUGHLY TO REMOVE ANY DUST OR DIRT. DO NOT USE WATER TO CLEAN A FLOOR PRIOR TO APPLICATION. IF APPLYING DIRECT TO CONCRETE, BE SURE CONCRETE IS CLEAN AND DRY. EXCESS MOISTURE WILL CAUSE BUBBLES TO FORM IN THE FINAL FILM. URETHANE MC 100™ IS SELF-PRIMING. IF APPLYING OVER BARE CONCRETE, THE CONCRETE MUST BE MECHANICALLY GROUND OR SHOT-BLAST TO A PROFILE RESEMBLING ICRI-CSP2-3. THE CONCRETE MUST BE AT LEAST 28 DAYS OLD AND DRY. SEE "LIMITATIONS" SECTION FOR ACCEPTABLE SLAB MOISTURE CONTENT. FOR HIGHER FILM BUILD, A PRIMER APPLICATION USING 100% SOLIDS EPOXY IS PREFERRED BEFORE APPLYING URETHANE MC 100™ POLYURETHANE.

MIXING

URETHANE MC 100™ IS A SINGLE COMPONENT PRODUCT, IT IS RECOMMENDED TO PRE-MIX THE



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CONTENTS OF THE CONTAINER BEFORE APPLYING WITH A STIR STICK OR SLOW SPEED DRILL.
IF APPLYING MATTE FINISH OR COLORED, MIX ACCORDING TO INSTRUCTIONS FOR MATTE AND/OR
COLOR ADDITIVE.

APPLICATION METHOD

APPLICATION THICKNESS IS A MAXIMUM OF 4 MILS WET. THICKER FILMS WILL CAUSE BUBBLES TO APPEAR OR FOAMING. TYPICAL APPLICATION THICKNESS IS 3-4 MILS WET, WHICH YIELDS 3-4 MILS DFT. USE A NON-SHEDDING MOHAIR ROLLER WITH 3/16"-1/4" NAP. LARGER NAP ROLLERS MAY CAUSE BUBBLES IN THE FILM. USE A DIP AND ROLL TECHNECH. DO NOT LEAVE PUDDLES OF MATERIAL ON THE SURFACE. COVERAGE RATES VARY BASED ON SUBSTRATE, SEE BELOW. USE ACETONE OR MEK TO CLEAN TOOLS. RE-COAT TIME IS 12-20 HOURS AFTER INITIAL COAT. HIGH TEMPETURES AND HUMIDITY WILL SHORTIN RE-COAT AND WORK TIME.

IF USING A COLOR PACK OR MATTE ADDITIVE, USE ONE 16-OUNCE CONTAINER PER GALLON OF PRODUCT. ADD THE PACK TO THE MATERIAL AND MIX AT LOW-MEDIUM SPEED FOR 60 SECONDS OR UNTIL UNIFORM USING A CLEAN, DRY MIXING BLADE. FOLLOW APPLICATION INSTRUCTIONS ABOVE. THIS PRODUCT IS SENSITIVE TO MOISTURE. KEEP CONTAINERS CLOSED AS MUCH AS POSSIBLE DURING APPLICATION. ONCE A COLOR PACK OR MATTE ADDITIVE IS INTRODUCED INTO THE URETHANE MC-100™, THE MATERIAL MUST BE USED WITHIN THE WORKING TIME SPECIFICATION.

CLEANING

CLEAN ALL APPLICATION EQUIPMENT WITH SOAP AND WATER. ONCE THE PRODUCT HAS HARDENED, IT CAN ONLY BE REMOVED BY MECHANICAL MEANS. IN CASE OF SKIN CONTACT, WASH THOROUGHLY WITH WARM SOAPY WATER.

RESTRICTIONS

- ✓ THIS PRODUCT IS BEST APPLIED AT A TEMPERATURE RANGE OF 50°F-85°F. WITH 40%-60% HUMIDITY
 - ✓ URETHANE MC 100™ IS SENSITIVE TO EXCESS SUBSTRATE MOISTURE CONTENT, MOISTURE VAPOR EMISSION RATE MUST NOT EXCEED 3 LBS/1000 FT² OVER A 24 HR PERIOD AS TESTED USING CALCIUM CHLORIDE TEST, ASTM F1869
 - ✓ DO NOT ALLOW MATERIAL TO PUDDLE
 - ✓ DO NOT APPLY AT A COVERAGE RATE BELOW 400 FT²/GALLON. EXCESSIVE FILM THICKNESS MAY CAUSE FOAMING IN FINAL FILM
 - ✓ MC 100™ IS SENSITIVE TO ALCOHOLS. CONTAMINATION WITH ALCOHOLS SUCH AS ISOPROPYL ALCOHOL (IPA) OR BENZYL ALCOHOL WILL CAUSE PRODUCT FAILURE, FOAM AND EXCESSIVE HEAT WHILE APPLYING.
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- ✓ MC 100™ IS SENSITIVE TO LIQUID EPOXY MATERIALS, CONTAMINATION WITH LIQUID EPOXY MATERIALS WILL ALSO CAUSE EXCESSIVE HEAT AND PRODUCT FAILURE
- ✓ DO NOT RE-USE PREVIOUSLY OPENED CONTAINERS
- ✓ IT IS NOT RECOMMENDED FOR THIS PRODUCT TO BE TRANSFERRED TO ANOTHER CONTAINER BEFORE MIXING

HEALTH AND SAFETY

IN CASE OF SKIN CONTACT, WASH WITH WATER AND SOAP. IN CASE OF EYE CONTACT, IMMEDIATELY RINSE WITH WATER FOR AT LEAST 15 MINUTES. CONSULT WITH A DOCTOR. FOR RESPIRATORY PROBLEMS, TRANSPORT VICTIM TO FRESH AIR. REMOVE CONTAMINATED CLOTHES AND CLEAN BEFORE REUSE. COMPONENTS A AND B CONTAIN TOXIC INGREDIENTS. PROLONGED CONTACT OF THIS PRODUCT WITH THE SKIN IS SUSCEPTIBLE TO PROVOKE AN IRRITATION. AVOID EYE CONTACT. CONTACT WITH MAY CAUSE SERIOUS BURNS. AVOID BREATHING VAPORS RELEASE FROM THIS PRODUCT. THIS PRODUCT IS A STRONG SENSITIZER. WEAR SAFETY GLASSES AND CHEMICAL RESISTANT GLOVES. A BREATHING APPARATUS FILTERING ORGANIC VAPORS APPROVED BY THE NIOSH/MSHA IS RECOMMENDED. PREDICT SUITABLE VENTILATION. CONSULT THE MATERIAL SAFETY DATA SHEET FOR FURTHER INFORMATION.

PROFESSIONAL USE ONLY

READ AND UNDERSTAND ALL THE INFORMATION CONTAINED IN THE PRODUCT INFORMATION BULLETIN'S, SDS'S AND PRODUCT LABELS PRIOR TO STARTING ANY PROJECT. NOTHING CONTAINED IN ANY OF MVP COATINGS CORPORATION'S MATERIALS RELIEVES THE END USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH OF MVP COATINGS CORPORATION'S PRODUCTS.



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WARRANTY STATEMENT

MVP COATINGS WARRANTS OUR PRODUCTS TO BE FREE FROM MANUFACTURING DEFECTS AND DEFECTIVE RAW MATERIALS FOR A PERIOD OF 1 YEAR. LIABILITY FOR PRODUCTS PROVEN DEFECTIVE IS LIMITED TO REPLACEMENT OF THE DEFECTIVE PRODUCT.

NOT INCLUDED IN THE WARRANTY IS DAMAGE DUE TO STRUCTURAL DESIGN DEFICIENCIES INCLUDING BUT NOT LIMITED TO SLAB CRACKING, GOUGING OR OTHER DAMAGE DUE TO EQUIPMENT, DELAMINATION CAUSED BY VAPOR TRANSMISSION, OR OTHER ELEMENTS BEYOND THE SCOPE OF PROTECTION OF THIS SYSTEM.

THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE BASED ON RELIABLE TEST RESULTS ACCORDING TO THE MANUFACTURER OF THE PRODUCT. THE DATA MENTIONED IS SPECIFIC TO THE MATERIAL INDICATED. IF USED IN COMBINATION WITH OTHER MATERIALS, THE RESULTS MAY BE DIFFERENT. IT IS THE RESPONSIBILITY OF THE USER TO VALIDATE THE INFORMATION THEREIN AND TO TEST THE PRODUCT BEFORE USING IT. MVP COATINGS, INC. ASSUMES NO LEGAL RESPONSIBILITY FOR THE RESULTS OBTAINED IN SUCH CASES. MVP COATINGS, INC. ASSUMES NO LEGAL RESPONSIBILITY FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, ECONOMIC OR ANY OTHER DAMAGES EXCEPT TO REPLACE THE PRODUCT OR TO REIMBURSEMENT THE PURCHASE PRICE, AS SET OUT IN THE PURCHASE CONTRACT.

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