Uretel MC

# Durex. Uretel MC

### **One-Component Moisture Curing Polyurethane Waterproofing Membrane**

**Description** Durex<sup>®</sup> Uretel MC One-Component Moisture Curing Polyurethane Membrane is a single component, high solids, moisture curing elastomeric polyurethane waterproofing membrane formulated for use in traffic-bearing and waterproofing applications. It adheres to concrete and wood surfaces to form a highly effective waterproofing membrane. Durex<sup>®</sup> Uretel MC must be top coated with a Durex<sup>®</sup> Traffic-Bearing Coating to achieve an effective Traffic-Bearing System.

# Uses Durex<sup>®</sup> Uretel MC is an elastomeric, single component polyurethane-based waterproofing membrane that is used in conjunction with other Durex<sup>®</sup> Traffic-Bearing coatings to form a comprehensive, traffic-bearing, waterproofing system. It is designed to perform as a water-resistant traffic-bearing membrane on a variety of surfaces such as concrete and wood. Capable of bridging cracks up to 1.6mm (1/16 of an inch).

- Ideal For
   . Balcony terraces and pedestrian walkways

   . Parking decks
   . Mechanical rooms
  - · Plaza, pool and recreational decks, and vehicular ramps
    - Stadiums
  - · Non-potable water-retention tanks, cooling towers and secondary containment

#### Features . Outstanding water impermeability sealing properties

- . Highly penetrable
- One Component, moisture curing polyurethane
- Highly elastomeric
- Excellent water immersion properties
- · High chemical resistance to acids, alkalis, salts, seawater, sewage and other compounds
- Fast-curing properties
- . Excellent low temperature flexibility and crack-bridging properties

#### **TECHNICAL DATA**

PHYSICAL PROPERTIES	
Colour	Grey
Resin Type	Polyurethane
Mix Ratio	Not Required
Cure Time @ 23°C	To touch: 6 hours
	To recoat: 8 hours
	Traffic: 48 hours
	Fully Cured: 7 days
Coverage	55 ft²/gal @ 25 mils DFT

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
Percent Solids	ASTM D7232-06	85%
V.O.C. & Absorption Specific Gravity	ASTM D3960 ASTM D333	120 g/L 1.28 ± 0.05 g/L
Viscosity	ASTM D2196	3000 cps
Abrasion Resistance	ASTM D5178-91, CS-17 wheel	75 mg, 1000 g load, 1000 cycles
Tensile Strength	ASTM D638-86	6.5 Mpa
Tear Strength	ASTM D624 Die C	83 lb/ln.in (14.5 KN/ln. m)
Elongation	ASTM D638-86	740%
Flexural Modulus	ASTM D522	2 mm film passes 12 mm mandrel
Low Temperature Flexibility	1/8" Mandrel @ -26°C	Pass
Water Absorption	ASTM D570	0.25%
Shore A Hardness	ASTM D2240	58
Pull-Off Strength of Coatings	ASTM D4541	2.4 MPa (350 psi) over concrete surface
Water Vapour Transmission	ASTM E96 – Procedure B	0.05 grain/hr∙pi² 0.029 g/hr·m²
Water Vapour Permeability	ASTM E96	0.20 Perm In. 0.0025 ng/Pa·s·m <sup>2</sup>
Water Vapour Permeance	ASTM E96	4.70 x 10 - 5 perm 0.028 ng/ Pa∙s∙m²

Packaging	Durex <sup>®</sup> Uretel MC is packaged in 18.9 L (5 gal) and 3.78 L (1 gal) pails.
Storage Conditions	Store Durex <sup>®</sup> Uretel MC in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions. Store between 10°C and 25°C. <b>KEEP FROM FREEZING</b> .
Surface Preparation	Concrete, wood and metal surfaces must be dry, free of dirt, oils, and any other contaminants that may prevent proper adhesion. Contact Durabond Technical Services for surface preparation methods of surfaces contaminated by oil or other materials.
	<b>Concrete</b> : New concrete shall be allowed to cure for a minimum of 28 days and have a compressive strength of concrete of at least 25 MPa (3,625 psi) before coating. Moisture content of the concrete shall be less than 4% by weight prior to application or the substrate must be primed with Durex <sup>®</sup> Epotel 100 Moisture Block. Contact a Durabond Technical Representative for further assistance. Prepare surfaces by shot blasting to achieve a surface consistent with ICRI CSP 3-4. Treat all cracks as per ASTM C1127. Correct concrete repairs with Durex <sup>®</sup> Dur-A-Patch EP. Not applicable for on-grade slab applications. Prime with Durex <sup>®</sup> Uretel Primer for best results.
	<b>Plywood</b> : Plywood must be minimum thickness of 1/2 inch exterior grade plywood secured and fastened solid to support substrates. Surfaces must be free of dirt and other contaminants that may prevent proper adhesion. Treat plywood joints with polyurethane sealant and Durex <sup>®</sup> Barrier Seam Tape laid in a bed of Durex <sup>®</sup> Uretel MC Elastomeric Polyurethane Waterproofing Membrane. Prime with Durex <sup>®</sup> Uretel Primer.
	Metal: Metal must be solvent wiped, lightly sanded and clean of all dirt, debris and rust prior to application.
Application	Apply Durex <sup>®</sup> Uretel MC with a notched squeegee at a uniform thickness of 30 mils WFT (or as specified) to form an effective waterproofing membrane. Measure wet film mil thickness with a thickness gauge. Allow membrane to cure for at least 8 hours prior to application of topcoat. Substrate temperature must be at least 3 degrees Celsius above dew point prior to application. Warm, humid environments will cure more rapidly. Ensure that the product is slightly tacky to the touch prior to installation of the topcoat. Specified Durex <sup>®</sup> Topcoat must be applied within 24 hours of application. Consult with Durabond Technical Services for further information.
Limitations	Do not apply Durex <sup>®</sup> Uretel MC if ambient and substrate temperature is less than 10 degrees C or above 32 degrees C during application and curing time. Topcoat with Durex <sup>®</sup> Uraflex 361 or Durex <sup>®</sup> Uraflex 375UV within 24 hours. Always adhere to published recoating schedules to ensure coating adhesion. Product must be applied in temperatures 3 degrees C above the dew point. Moisture content of the concrete must be less than 4% by weight, if not the surface must be primed with Durex <sup>®</sup> Epotel Moisture Block 100. Do not add solvent to the mixture.
Clean-up	Wash all tools and equipment immediately with mineral Xylene or solvent-based cleaner. Allow any unused product to harden in container and discard according to local regulations.
Health and Safety	Use under well-ventilated conditions with rubber gloves when handling the product. Avoid contact with eyes and prolonged contact with skin. If contact occurs, flush immediately with water and seek medical attention if irritation occurs. Harmful if swallowed. Do not induce vomiting. Keep product out of reach of children. Read published Material Safety Data Sheet for additional information.
Warranty	Durabond warrants this product is free of manufacturing defects, and will replace at no charge, provided it has been applied within 12 months of purchase, it has been installed for uses suitable for this product and in accordance with the manufacturer's instructions.
Technical Services	Technical support is available upon request at info@durabond.com. For the latest version of this data sheet, please visit our website at www.durabond.com, call toll free at 1-877-DURABOND (387-2266) or speak with your Durabond Technical Coatings Ltd. sales representative.

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