

## TECHNICAL DATA SHEET

### **POLYCOAT MORTAR MD**

#### *Self-smoothing PU Mortar*

#### PRODUCT DESCRIPTION

**POLYCOAT MORTAR MD** is a 3-5 mm thick self-leveling polyurethane mortar floor topping. It has an attractive smooth, matt, colored floor finish with high abrasion resistance and excellent chemical resistance. It is suitable for dry and semi-wet areas where a seamless finish and a long-lasting floor are needed.

#### CUSTOMER BENEFITS

- Seamless finish
- Does not promote bacterial and fungal growth
- Impact and abrasion resistant surface suitable for heavy foot traffic and forklift operation
- No harmful emissions and low odor
- Excellent corrosion and chemical resistance
- Steam Cleanable: non-dusting, non-tainting
- Anti-slip surface

#### RECOMMENDED FOR

- Kitchen floors
- Cold storage
- Meat processing
- Supermarkets
- Catering and laundry areas
- Clean rooms
- Warehouse

#### INSTRUCTION FOR USE

##### **SURFACE PREPARATION**

The concrete substrate should have a minimum strength of 25 MPa. Surfaces must be free from oil, grease, and other contaminants. The substrate should be dry (75% relative humidity) and free from rising groundwater. The maximum moisture content in the subfloor should not exceed 5%. Apply one coat of **EPOCOAT MB WHITE** as a primer before application of **POLYCOAT MORTAR MD**.

**Note:** Do not apply if the temperature of the concrete is less than 10°C or the relative humidity is greater than 85%.

##### **NEW CONCRETE FLOORS**

New concrete should be at least 28 days old. Laitance deposits are removed by mechanical scabbling or grinding.

##### **OLD CONCRETE FLOORS**

Existing concrete floors that require refurbishment must be prepared to ensure a strong adhesive bond between the material and the existing floor. Mechanical cleaning methods are strongly recommended where heavy contamination by oil and grease has occurred or existing coatings are present. To ensure adhesion, all contamination should be removed.

##### **MIXING**

Mixing should be carried out using a forced action mixer or a heavy-duty, slow-speed drill fitted with a spiral mixing paddle.

Transfer Part A into a mixing container then add Part D (colorant) and mix thoroughly for 1 min. Add Part B and mix at a low speed for at least 1 min until uniform. Add Part C slowly while stirring. Continue mixing for another 2 mins until the four components are mixed thoroughly. Frequently scrape the sides and bottom of the mixing container during mixing to ensure no unmixed components. Thin the mixture before application using Part E (thinner) for good flow and ease of application.

**Note:** The pot life is 15 mins from mixing. All the mixed products should be used within the pot life. The unused mixed product left in the container may release hazardous fumes due to an exothermic reaction.

##### **APPLICATION**

The mixed material should be poured into the prepared substrate as soon as the mixing is complete. Apply a 3-5mm thick **POLYCOAT MORTAR MD** top coat by pouring the mixture, and spread slowly and evenly using a serrated trowel. Immediately after laying, the material should be rolled using a spiked roller with a back-and-forth motion to assist air release. Further light rolling may be required to remove surface imperfections but should be done prior to the setting of the product.

**Note:** If severe pin-holes are observed from the cured scratch coat, it indicates that there is air coming out from the substrate and proper treatment should be done.

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### POLYCOAT MORTAR MD

#### Self-smoothing PU Mortar

#### TECHNICAL PROPERTIES

Appearance	: Smooth Matt Finish
Color	: Red, buff, sky blue, green, light gray, dark gray, and black
Potlife	: 15 mins.
Full Cure	: 7 days
Water permeability	: Nil-Karsten test (impermeable)
Shore D Hardness	: 81
Compressive Strength	: 6,400 psi
Flexural Strength	: 1,900 psi
Tensile Strength	: 1,300 psi
Crack bridging ability	: 1mm
Reaction to fire	: Bfl – s1
Temperature Resistance:	-15°C to 90°C
at 4mm	
Abrasion resistance	: 0.03g / 1000 cycles (Taber Abrader)
Slip-resistance	: R9-R13
Bond strength (Pull-off test)	: > 5.5 MPa

#### PACKAGING

**POLYCOAT MORTAR MD** is supplied in 5 components in a 17.37 kg set:

- Part A – Base (2.5 kg)
- Part B – Hardener (2.5 kg)
- Part C – Filler (12 kg)
- Part D – Colorant (0.2 kg)
- Part E – Thinner (0.17 kg)

#### COVERAGE

2.83 m<sup>2</sup> / 17.2 kg set at 3 mm thickness

2.125 m<sup>2</sup> / 17.2 kg set at 4 mm thickness

1.7 m<sup>2</sup> / 17.2 kg set at 5 mm thickness

**Note:** The coverage rate is calculated based on a smooth surface and may vary based on the substrate roughness and other conditions.

#### STORAGE AND HANDLING

**POLYCOAT MORTAR MD** Part A and B have a minimum shelf life of 12 months, and Part C has a minimum shelf life of 6 months when stored in the original unopened containers if maintained in dry storage conditions away from direct sunlight.

#### PRECAUTIONS

##### HEALTH AND SAFETY

**POLYCOAT MORTAR MD** should not be swallowed. Any eye contamination should be washed with plenty of water. Avoid inhalation of vapors and ensure adequate ventilation. Wear proper protective clothing, gloves, and eye protection.

**POLYCOAT MORTAR MD** is non-flammable.

Refer to the latest Safety Data Sheet (SDS) for comprehensive safety information on the proper handling of this product.

##### WARRANTY AND DISCLAIMERS

*The information provided in this technical data sheet is based on our best knowledge and testing methods. Any product use outside of specifications or improper storage or installation voids any warranty. Users are encouraged to conduct their own testing to assess product suitability. Always consult the product's safety data sheet (SDS) for safety guidelines and follow recommended precautions. We reserve the right to update this data sheet without notice, and users should ensure they have the latest information.*