



MC-DUR 1005 UL-IN

High Strength, self-Smoothing, Epoxy Based Underlay for Flooring

Product Properties

- Good Chemical and high abrasion resistance.
- Suitable for 1.5-5 mm thick application in a single application
- Cost effective and easy to apply
- Good adhesion to concrete
- Provides a good Seam less Surface for Epoxy Coating or ESL application

Areas of Application

- As an Underlay for Mechanical and chemically resistant Flooring for mineral based substrates
- As an Underlay for Oil & petrol resistant in car parks, garages, petrol stations and car washes
- As an Underlay for Water and Chemical resistant flooring in chemical, pharmaceutical, food Processing and bottling plants, dairies etc

Application Notes

General

MC-DUR 1005 UL-IN is a pure epoxy resin that is highly fillable to obtain economical epoxy Underlay screeds for abrasion resistant surfaces. The degree of filling can be established at site depending upon requirements. **MC-DUR 1005 UL-IN** can be applied up to 5mm maximum thickness as an under lay application. This product is available in three component system. This under lay can provide a suitable base for any kind of resin flooring system.

Instruction for Use

Surface Preparation

All surfaces must be smooth, sound and free from any unsound material and any contaminations such as oil, grease, dust, loose particles and organic growth. Concrete surfaces must be fully cured, laitance free and free from any traces of shuttering, release oils and curing compounds. For old structures, existing paints should be removed thoroughly and all the honey combs, pinholes, bug holes should be filled with Nafuquick range Mortars. The minimum concrete compressive strength necessary should be >25 N/mm². A substrate pull off strength of 1.5 N/mm² is required. The mineral based substrate should be minimum 28 days old and should have maximum moisture content maximum 5%.

Priming

Normally Primer is not required before application of **MC-DUR 1005 UL-IN**. But if the concrete surface is porous and there is any chance for osmosis, the application of suitable primer will increase its performance. After the surface preparation, the surface should be primed by using-**MC DUR Range Primer**.

If the moisture content in the substrate is more than 5% then, please take the advice of MC Bauchemie for suitable solution. The coverage of the primer should be taken care during its application, to ensure a strong and good bonding between substrate and coating. If in some of the cases priming is not sufficient to fill all the pores and blow holes in the substrate, in that case scratch coat is necessary to overcome this situation. For scratch coat the primer is filled up with oven dried quartz sand (0.1-0.3mm) with a mixing ratio 1:1 p.b.w. The scratch coat is applied with steel floats, rubber squeegees or hard rubber floats

Mixing

MC-DUR 1005 UL-IN Consists of three components, supplied in prepacked quantities. First of all, the resin component of the product shall be stirred alone, then the hardener should be added to it and thoroughly mixed using slow rotating mechanical drill paddles. The contents of the mixture should be completely emptied into a clean container and mixed again to ensure homogeneity. Mixing ratio for the resin and hardener is 1,65:1 p.b.w. Please ensure both the resin and hardener containers are completely emptied. The filler can be added at this stage. A Suitable mixing equipment must be used, such equipment being defined as either a heavy-duty variable speed drill and Mixing Paddle, or forced action mixers such as Creteangle or similar can be used.

Application

The applied mixed Material of **MC-DUR 1005 UL-IN** to be poured onto the substrate and spread with a steel float, Pin float or rubber squeegee. Coverage should be maintained as mentioned in Technical Details. Then after spreading all the fresh areas to be de-aerated cross-wise with a spiked roller. If there is any requirement to achieve an anti-skid surface. Then oven-dried quartz-sand can be strewn in excess (e.g 0.2-0.7mm or large) while still fresh. After curing the excess sand is removed. The top layer can apply sharply across the grains using a rubber squeegee and rolled crosswise with a short-piled lambskin roller. Depending on the system Recommendation

Safety & Precaution

For all work with Epoxy resins the appropriate protective clothing (safety glasses and gloves) should be worn. The unmixed hardener is highly alkaline and a skin irritant. It must not come into contact with the skin, especially the mucous membranes.

If resin gets into the eyes it should be removed immediately using an eyewash. Suitable eyewash should be kept on the building site at all times. Medical advice should be sought immediately.

When working with reactive resins the rooms must be well ventilated during application and curing



Technical Data For MC-DUR 1005 UL-IN

Characteristic	Unit	Value*	Comments
Mixed Density		1,84±0.05	
Minimum application temperature	°C	+5°C	
Pot life	Minutes	30 to 40	At 30° C
Mixing ratio	p.b.w	1,65:1,00:8,00	Resin:Hardener:Filler
Flow	Cm	20	At 30° C
Full Cure	Days	7	At 30° C
Compressive Strength	Mpa	>25 >50	3 Days Cube size as per ASTM 109 (50mm Cube) 7 Days Cube size as per ASTM 109 (50mm Cube)
Consumption	Kg	1.8	Per m ² per mm thickness

Product Characteristics for MC DUR 1005 UL-IN

Type of Product	Fillable Epoxy Screed
Form	Resin, Hardener and Filler
Colour	Reddish Brown
Shelf Life	12 months from date of Manufacture
Delivery	27.5 kg (15L) Pack
Storage	In Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost
Disposal	Empty packs completely and dispose off carefully to protect our Environment

Safety Advice

Please Take notice of the safety information and advice given on the packaging labels, safety information sheets and General Application Advice.

Note: - The information on this Data Sheet is based on our experiences and correct to the best of our knowledge. It is However, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our Data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are binding if given in written form. The accepted engineering rules must be observed at all times.

Edition: - MC/IND/R1/DEC2020, Some Technical Changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.