



MC-DUR 111 D

Two component, water based epoxy resin for coating and ECC mortars

Product Properties

- Water based two component epoxy resin
- Free from organic solvents
- Will adhere to slightly damp surfaces
- Resistant to diesel oil, dilute acids and alkalis, as well as numerous organic solvents
- Can be applied on fresh concrete as a curing membrane
- Environmentally friendly
- Transparent and pigmented types available

Areas of Application

- Mechanical and chemically resistant coating for mineral based substrates
- Protection for bridges
- Oil & petrol resistant in car parks, garages, petrol stations and car washes
- Water and Chemical resistant coating in chemical, pharmaceutical, food Processing and bottling plants, dairies etc
- In buildings where solvent containing coatings either cannot or should not be used e.g. high technology equipment rooms, precision machinery and Computer rooms
- For preparation of ECC mortar for repairs

Application Notes

General

MC-DUR 111 D is a two-component solvent free epoxy resin coating. It is water based & free from organic solvents. It is highly resistant to diesel oil, diluted acids & alkalis. It can be applied on fresh concrete as a curing membrane. Since it is solvent free, it is ideal for application in high technology equipment rooms, precision machinery & computer rooms.

Advantages

MC-DUR 111 D is free from organic solvents and it also adheres to slightly damp surfaces. In addition, it is resistant to diesel oil, dilute acids and alkalis, as well as numerous organic solvents. **MC-DUR 111 D** can be applied on fresh concrete, as a curing membrane and it is environmentally friendly. **MC-DUR 111 D** is available in transparent as well as pigmented types.

Instruction for use

Surface (concrete, mortar, and brickwork) must be clean and free from all dirt, dust, oil and other contaminants. Old coatings, oil stains, cement laitance etc. must be completely removed. The minimum concrete compressive strength necessary should be >25 N/mm². A substrate pull off strength of 1.5 N/mm² is required.

Pores and surface irregularities should be repaired prior to application. Such repair can be achieved using a scratch coat with a resin or cement based fine mortar.

Mixing

Before application, the base component is thoroughly mixed and then the hardener is added. The two components are then carefully mixed together by means of a slowly rotating electric drill and paddle until and homogeneous resin is obtained. After this the entire mixture is emptied into a clean container and mixed again to ensure complete homogenous mixing of the material.

Only prepare sufficient **MC-DUR 111 D** for use within the pot life (approx. 90mins. at +20°C). In case of use after pot life, the material may not cure completely.

Higher temperatures considerably shorten the pot life. Pack should not be left in direct sunlight. Keep tins closed when not in use to prevent unnecessary evaporation. On return to work the material should be thoroughly re-mixed. Material should not be applied at temperatures under +10°C or over 85% relative humidity.

Surfaces must be primed with **MC-DUR 111 D** transparent. The primer is best applied by means of brush or roller, but an airless spray may be used. Pigmented systems should be applied using the same equipment. Depending on the type of airless sprayer used, colored coatings can be thinned with 5 to 20% water. When working on surfaces subject to contact with potable water, the material should not be thinned.

The interval between work steps should not exceed 24 hours. Depending on exposure, 1 to 2 pigmented coats may be required. Coverage is dependent on temperature, texture and porosity of the substrate. Avoid applying too much material during application.

Coat is touch-dry after 5 to 6 hours. The chemical hardening takes about 24 to 48 hours, while full resistance to chemical and mechanical loading will be achieved after 7 days. These values relate to conditions of +23°C and 50% relative humidity.

Water can be used for cleaning of all tools. However, tools and equipment should be cleaned within the pot life of the material. Cleaning water and product remains should not be dumped into normal drainage system.

Further Instructions / Precautions

Application of MC-DUR 111D



Application Example



Technical Data For MC-DUR 111 D

Characteristic	Unit	Value	Comments
Density	g / cm ²	1.02 1.32	Transparent Coloured
Minimum application temperature	°C	+20°C	
Pot life	Minutes	90	+23°C and 50% relative humidity
Mixing ratio	Parts by weight Resin : Hardener	3:1 100:30	Transparent Coloured
Consumption	g / m ²	250 to 300 200 to 250	as curing compound

Product Characteristics for MC-DUR 111 D

Type of Product	Water Based Epoxy Coating
Form	Resin and Hardener
Colour	Transparent, Pigmented (on request)
Shelf Life	9 months from date of Manufacture
Delivery	Resin: 30 kg & 5 kg pails. Hardener: 5 kg pails & 1 kg bottle
Storage	In Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost
Disposal	Empty packs completely and dispose off carefully to protect our Environment

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 may differ from the data contained in our information sheets, are only binding if given in written form. The accepted engineering rules must be observed at all times. E. & O.E.

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Edition: January 2013