MFD-SYSTEM EPOXID
EP 106
AgBB-tested, low-emission 2-component epoxy resin primer

Packaging units

Article no.	Packaging	Content (kg)	Units/pallet
00106A	Combo can	1.00 kg	240
00106B	Bucket combo	10.00 kg	30
00106C	Hobbock combo	30.00 kg	12
00106D	Drum combo	600.00 kg	0,5

Product characteristics

Mixing ratio parts by weight	A : B = 100 : 50
Mixing ratio parts by volume	A : B = 100 : 53
Processing time	10 °C / 50 °F : 50 min. 20 °C / 68 °F : 30 min. 30 °C / 86 °F : 15 min.
Processing temperature	Minimum 10 °C / 50 °F (room and floor temperature)
Curing time (accessibility)	10 °C / 50 °F : 14 - 18 hrs. 20 °C / 68 °F : 7 - 10 hrs. 30 °C / 86 °F : 5 - 7 hrs.
Curing	2 - 3 days until mechanical load at 20 °C / 68 °F 7 days until chemical load at 20 °C / 68 °F
Further coatings	After curing, but after 48 hours at the latest at 20 °C / 68 °F
Consumption	Base coat: approx. 0.250 - 0.350 kg/m² Scratch coat: approx. 0.450 - 0.600 kg/m² Mortar: approx. 0.150 - 0.300 kg/m² for each mm of layer
Shelf life	12 months (originally sealed)

Product description

MFD-SYSTEM EPOXID EP 106 is a high-quality, low-emission and all-purpose 2-component epoxy resin based on the extremely proven **MFD-SYSTEM EPOXID EP 105**.

MFD-SYSTEM EPOXID EP 106 is
certified according to “Indoor Air Comfort Gold” and
meets the requirements for a sustainable building certification according to DGNB, LEED or BREEAM. The “Indoor Air Comfort Gold” product certification sets the highest requirements for the emission of volatile organic compounds and meets not only the German requirements of AgBB or ABG, but also the emissions regulations of many other European countries.

Use **MFD-SYSTEM EPOXID EP 106** as base coat, for scratch coats, or as levelling mortar for renovations or new constructions. Due to its low-viscosity and good wettability properties, the resin penetrates very well into the substrate and develops a high-strength base for subsequent coatings.

Area of application

- As low-emission primer for scratch coats and priming coats.
- For levelling layers and epoxy resin mortar.

Product features

- Total Solid according to GISCODE (Test method "Deutsche Bauchemie")
- tested, low-emission quality
- high-quality primer
- all-purpose use
- consistent to hydrolysis and saponification
- free of deleterious substances against varnish
- proven quality

Technical data

Viscosity - Component A+B	550	mPas	DIN EN ISO 3219 (23 °C / 73.4 °F)
Solid content	> 99	%	MFD method DIN EN ISO 2811-
Density - Component A+B	1.10	kg/l	2 (20 °C / 68 °F)
Weight loss	0.3	weight-%	after 28 days
Water absorption	< 0.2	weight-%	DIN 53495
Bending tensile strength	35	N/mm²	DIN EN 196/1
Compressive strength	80	N/mm²	DIN EN 196/1
Adhesive tensile strength	> 1.5	N/mm²	DIN EN 1542
Shore-hardness D	80	-	DIN 53505 (after 7 days)

The values established in tests are average values. Deviations from the product specification may occur.

Included in systems

- System C1 - MFD LOW-VOC EP Standard
- System C2 - MFD LOW-VOC EP RX
- System C4 - MFD LOW-VOC PHARMA EP Screed
- System C5 - MFD LOW-VOC DECOR EP RX
- System D1 - MFD TECH CLEAN INDUSTRIAL LOW-VOC EP
- System F6 - MFD CONDUCTIVE LOW-VOC PU ESD Elastic
- System F7 - MFD CONDUCTIVE EP ESD Structured
- System G7 - MFD DECOR LOW-VOC PU Light Sealed

Please visit our website to get more information about our MFD systems: www.magic-floor-design.ae.

Tests

External test certificates are available:

- Certified as low-emission according to Eurofins "Indoor Air Comfort Gold“. In combination with different coatings, compliant with AgBB for recreation rooms.
- Examining the imperviousness to radon when combined with the coating **PU 155**: > 2.4 mm impervious to radon.

Note:

Please ask for the tested system build-up!

Substrate

The substrate to be coated must be even, dry, free of dust, sufficiently resistant to tension and compression as well as be free from weakly-bonded components or surfaces. Materials impairing adhesion such as grease, oil, and paint residues should be removed with suitable measures. Surfaces suitable for priming are concrete C20/25, cement screed CT-C35-F5, as well as other sufficiently solid substrates. The substrate has to have adequately high strength for the intended occupational use. Coating mastic asphalt with epoxy resin is not recommended. The substrates to be coated should be prepared mechanically, preferably by shot blasting. The surface strength must then be at least 1.5 N/mm². For concrete, moisture content must not exceed 4.5 CM-%, remaining residual humidity. The

possibility of moisture ingress from the rear must be permanently excluded. Observe the information issued by the trade associations, e.g. the most recent versions of BEB worksheets KH-0/U and KH-0/S. Reconstructing floors may require special procedures. Obtain technical advice.

Mixing

Combo-packaging will be supplied in the correctly measured mixing ratio. The package of Component A has sufficient volume for the entire packaging unit. Empty all of the hardener compound B and mix immediately. Blend with a slow speed mixer (200 - 400 r/pm) for at least 2 - 3 minutes until a homogeneous, streak-free compound forms. To prevent mixing errors, empty ("repot") the entire resin/ hardener mixture into a clean container and mix it once again briefly.

Producing scratch coats and mortar:

Scratch coats:

1.0 kg **MFD-SYSTEM EPOXID EP 106**
0.5 - 0.8 kg mixed sand **MFD-Mischsand 2/1**

Epoxy resin mortar:

1.0 kg **MFD-SYSTEM EPOXID EP 106**
8.0 - 12.0 kg mixed sand **MFD-Mischsand 1**

Before adding any additives, the resin must be premixed, only then is added the supplement. The amount of mixed sand depends on the necessary consistency and stability.

Processing

Base coat: process the material as a base coat immediately after mixing with a squeegee, trowel, or nylon roller. Apply an evenly sealed coat on the substrate. To achieve a dense surface, apply a second layer or a saturated scratch coat if the substrate is highly absorbent. Scatter the fresh coating with quartz sand (grain size 0.3/0.8 mm) for optimum adhesion. This is mandatory if the subsequent coating will be applied later than 24 hours after the primer.

Scratch coat: apply a scratch coat before any further coatings to level the substrate - but also for full pore-closure. Use a trowel, metal, or rubber squeegee. The consistency of the filling compound has to be adjusted according to the substrate absorbency, for a material that runs true.

Priming filler: base coats can be applied as smoothing filler at the same time if it is ensured that a sufficient sealing is achieved in one coat for subsequent coatings. Usually, prime filling coats may be filled with 0.5 kg of mixed sand **MFD-Mischsand 2/1** for 1 kg of epoxy resin. Apply with a rubber squeegee, with a consumption of 0.7 - 1.0 kg/m², depending on the depth of roughness of the substrate.

Epoxy resin mortar: for repair work, the mortar can be made of **EP 106**.

Special remarks: we advise against the "gumming“ of screed/flat joints with pure or with epoxy resin-filled thixotropic agent. In the course of time, these areas will begin to show on the surface. For the application, always use the MFD priming resin in combination with quartz sand e.g. **MFD-Mischsand 1** or **MFD-Mischsand 2/1.** It is recommended to add at least 1 to 3 parts by weight of filler.

Cleaning	To remove fresh contamination and to clean tools, use thinner **VR 24** or **VR 33** immediately. Hardened material can only be removed mechanically.
Storage	Store in dry and if possible, at frost-free conditions. Ideal storage temperature is between 10 - 20 °C / 50 - 68 °F. Bring to a suitable processing temperature before application. Tightly re-seal opened packages and use up the content as soon as possible.
Special remarks	The product is regulated by the German Ordinance on Hazardous Substances (GefStoffV), the German Ordinance on Industrial Safety and Health (BetrSichV), and transport regulations for hazardous goods. The necessary information is contained in the DIN Safety Data Sheet. Observe all identification information on the container label! GISCODE: RE30 **Indication of VOC-content:** (EG-Regulation 2004/42) Maximum Permissible Value 500 g/l (2010,II,j/lb): Ready-for-use product contains < 500 g/l VOC.

VOC content

The product complies with the high requirements to low VOC contents, as required for sustainable construction. Therefore, these values exceed by far the European Union directive 2004/42/EG (decopaint directive).

	Limit value	Actual content	
Decopaint Directive 2004/42/EG - Component A	< 500	1,2	g/l
Decopaint Directive 2004/42/EG - Component B	< 500	0	g/l
DGNB - Components A + B	< 3	0,07	%
Klima:aktiv - Components A + B	< 3	0,07	%
Minergie ECO ® - Components A + B	< 1 (< 2)	0,07	%

(According to the Decopaint directive, single components are used for calculation. In the sustainable building rating systems, the mixture of both components in the correct mixing ratio is the determining factor.)

Address: 206 Salah AL Din Street, 25th Street, AL Khabaisi Deira Dubai 124173, Dubai
Telefon: 971509961506
Email: info@magic-floor-design.ae
www.magic-floor-design.ae