

Technical Information Sheet Article No. 0916

Epoxy FAS 100

Substrate tolerant, transparent epoxy resin

Range of use

Epoxy FAS 100 is an unpigmented epoxy resin binder that is used as an impregnation agent, primer, levelling layer and for the production of compression resistant mortars, flow mortars, blinding layers for blinded covers. It is also used as a special primer under polyurethanes:

Application examples:

- Consumer markets
- Shops
- Fabrication halls
- Assembly areas
- Food industry
- Butcher operations
- Bakeries

Property profile

Epoxy FAS 100 is a transparent, 2-component, liquid epoxy resin on a bisphenol A/F-base.

- Ideal beneath PUR coatings
- Substrate tolerant
- Good penetration capacity
- Plasticizer-free
- Free of nonylphenol and alkenylphenol
- Can be subjected to mechanical loads
- Can be subjected to chemical loads

Characteristic data of the product

	Comp. A	Comp. B	Mixture
Density:	1.07 g/cm ³	0.97 g/cm ³	1.08 g/cm ³
Viscosity:	900 mPas	500 mPas	750 mPas
	1 : 10 mortar*		
Compressive strength:	56 N/mm ²		
Flexural/tensile strength:	23N/mm ²		

* Epoxy resin mortar with standard sand

Substrate

The substrate must be load-bearing, form stable, sound, free of loose material, dust, oil, grease, rubber marks and other substances with a parting effect. The tensile strength on the surface of the substrate must be 1.5 N/mm² on average, compressive strength at least 25 N/mm².

Substrates can be humid or matt damp but must not have any standing water.

- Concrete max. 6% by mass
- Cement screed max. 6% by mass

Suitability for coating must be tested on steel, stainless steel, aluminium and ceramic covers. If necessary, set up trial areas.

They must also be suitable for blasting or sanding and should not be exposed to greater temperature fluctuations (vapour pressure). On matt damp substrates, a primer and scratch coat are required as a rule.

Substrate preparation

Substrates should be prepared by suitable chemical or mechanical means, e.g. steel ball jetting or diamond sanding so that they fulfil the listed requirements. Missing and broken out areas in the substrate should be filled/closed flush with the surface using the Remmers PCC System or with Remmers EP Mortars.

Directions

Add the hardener (comp. B) to the base compound (comp. A). Mix intensively with a slow speed mixer (max. 400 rpm.). Then pour into a

separate container and mix again thoroughly. In the case of filled systems, the corresponding quantity of filler is added to the epoxy resin mixture while stirring slowly and mixing in thoroughly. The mixture is then poured onto the surface and distributed with a suitable tool.

Mixing ratio

71 : 29 parts by weight

Pot-life

At 20 °C and 60% relative humidity approx. 30 minutes. Higher temperatures reduce, lower temperatures increase pot-life.

Notes on working

Application method

Depending on application with a rubber wiper, epoxy roller or smoothing trowel

Waiting period

The waiting time between working operations at 20 °C should be at least 12 hours and max. 2 days. If waiting time is longer than 48 hours, the surface of the last applied material must be blinded with fire-dried quartz sand.

The time given is reduced at higher temperatures and increased at lower temperatures.

Working temperature

The temperature of the resin mixture, surrounding air and substrate must be at least 8 °C and not higher than 30 °C. Relative humidity should not exceed 80%. The substrate temperature must be at least 3 °C above the dew point temperature.

Drying time

At 20 °C and 60% relative humidity: foot traffic after 12 hours, mechanical loads after 3 days, fully cured after 7 days. At lower temperatures correspondingly longer.

Protect the applied material from moisture during the curing process (approx. 24 hours at 20 °C) since the surface may be disturbed and adhesion reduced otherwise.

Application examples

Impregnation/consolidation agent:

The pure resin diluted 10% with Remmers V 101 thinner is poured onto the surface and distributed with a suitable tool, e.g. a rubber wiper, until saturation has been achieved. The material is then worked into the substrate with an epoxy roller.

Application rate depending on substrate is approx. 0.30-0.50 kg/m² epoxy resin.

Priming:

The pure resin is poured generously over the surface and distributed by suitable means, e.g. a rubber wiper, so that the pore volume of the substrate is completely filled. Then work into the substrate with an epoxy roller. Application rate depending on substrate and application approx. 0.30-0.50 kg/m².

Levelling layer/scratch coat:

The material which has been filled up to 1 : 1 parts by weight is distributed with a smoothing trowel or priming blade and if necessary worked over with a spiked roller. Application rate per mm thick layer: approx. 0.85 kg/m² epoxy resin and 0.85 kg/m² Remmers SelectMix.

Flow screed/blinding layer:

The material which has been filled up to 1 : 1.5 parts by weight is distributed with a toothed trowel or toothed rubber wiper and worked over with a spiked roller. Application rate per mm thick layer: approx. 0.70 kg/m² epoxy resin and 1.05 kg/m² Remmers SelectMix SBL.

Tools, cleaning

Smoothing trowel, toothed trowel, rubber wiper, epoxy roller, spiked roller, mixing equipment, also positive mixer.

Clean tools and equipment immediately while the material is still fresh with V 101 Thinner.

Notes

All of the values given were measured in laboratory conditions (20 °C) and with standard colours.

When worked at the building site, values as well as the degree of filling and application rates specified may deviate from the values given in this Technical Information Sheet.

Abrasive mechanical loads will cause wear marks on the surface of the coating. Not suitable for vehicles with metal or polyamide tyres!

Because of the varying absorption capacity of cementitious substrates, impregnated surfaces look spotty.

Epoxy resins are not colourfast in general when exposed to UV-light and weather.

Further notes on working and maintenance of the listed products are found in the latest Technical Information Sheets as well as in Remmers notes on placing floor covers.

Packaging, application rate, shelf-life

Packaging:

2.5 kg, 10 kg and 25 kg tin containers

Application rate:

Depending on application between 0.2-0.85 kg/m²

Shelf-life:

At least 9 months in closed and unmixed, original containers stored cool but frost-free.


Safety, ecology, disposal

Further information on safety when transporting, storing and handling as well as disposal and ecology is found in the latest Safety Data Sheet.

GISCODE: 01

Chem VOC Paint V (2004/42/EC):

Group (LB): j
Stage 2 (2010): max. 500 g/l Stage 1 (2007): max- 550 g/l This product contains < 500 g/l

	
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EN 13813 SR-B1, 5-AR1-IR4	
Epoxy ESD Color	
Synthetic resin screed for use in buildings (System construction according to directions in the Technical Information Sheet)	
Behaviour under fire	B _{fl} ³⁾
Release of corrosive substances	SR
Water permeability	NPD ²⁾
Resistance to wear	≤ AR 1 ¹⁾
Adhesive pull strength	≥ B 1.5
Impact resistance	≥ IR 4
Sound insulation	NPD
Sound absorption	NPD
Thermal insulation	NPD
Resistance to chemicals	NPD

- 1) Determined according to BCA method on smooth covers
 2) NPD: characteristic value not stipulated
 3) In Germany, DIN 4102 is presently still valid, Fire Class B2 is fulfilled and is comparable with DIN EN 13501-1 Class B_{fl}

The statements above are compiled from our field of production and according to the latest technological developments and application techniques.

Since application and working are beyond our control, no liability of the producer can be derived from the contents of this information sheet. Any statements made beyond the contents of this information must be confirmed in writing by the producer.

In all cases, our general conditions of sale are valid. With the publication of this Technical Information Sheet all previous editions are no longer valid.



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