

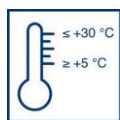
Technical Data Sheet
Art. No. 6218

Epoxy ESC 100

Transparent epoxy resin for epoxy resin screeds



Mixing ratio
2 components



Working temperature



Mixing time



Mortar cover



Pot-life



Shelf-life



Store frost-free

Range of use

Remmers Epoxy ESC 100 is an unpigmented binder that is used for the production of synthetic resin mortars.

Remmers Epoxy ESC 100 is a transparent epoxy resin binder that is used for the production of fast screeds on a synthetic resin base.

Recommended forms of execution:
Bonded screed ≥ 4 mm
Screen on a parting layer ≥ 30 mm
Screed on a layer of insulation ≥ 35 mm

Property profile

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

- Fire rating A2 (1:25)
- Plasticizer-free
- Nonylphenol and alkylphenol-free
- Can be pumped by machine (e.g. Estrichboy)
- Can be smoothed by machine (e.g. disk or walk-behind power trowel)

Produktkenndaten

	Comp. A	Comp. B	Mixture
Density (25 °C):	1.07 g/cm ³	0.97 g/cm ³	1.08 g/cm ³
Viscosity 25 °C):	900 mPa·s	750 mPa·s	1100 mPa·s

For further technical values, see Test Report (IBF M 268/11)

Substrate

The substrate must be load-bearing, dimensionally stable, sound and free of loose material, dust, oil, grease, rubber tyre marks and other substances that could interfere with adhesion. The tensile strength of the substrate surface must be 1.5 N/mm² on average, compressive strength at least 25 N/mm².

The substrate must have also reached compensation moisture balance and be protected from the effects of moisture from behind, also during utilisation.

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

Preparation of the substrate

The substrate should be prepared by suitable measures, e.g. steel ball jetting or a diamond grinder so that it meets the specified requirements.

Broken out and missing areas in the substrate can be filled with a mixture of Epoxy ESC 100 and Selectmix C2 (Mixing ratio 1:25 parts by weight).

Prime the surface with a suitable primer, e.g. Remmers Epoxy ST 100 and blind generously with Quartz 07/12 (approx. 2 kg/m²). As an alternative, work can be carried out wet-on-wet.

When used as a binder for synthetic resin screeds on a parting

layer/layer of insulation, priming is not necessary.

Production

Tin container:

Add the entire quantity of hardener (comp. B) to the basic compound (comp. A) and mix with a slow speed mixer (approx. 300-400 rpm.)

Multi-chamber bag:

Open the outer packaging at the notch and remove the transparent, multi-chamber bag. Remove the divider clip of the 2-component bag and knead the two components together thoroughly (approx. 60 sec.)

Production of a screed mixture:

Add the entire quantity of the resin to the filler (e.g. Selectmix C2). To improve working properties, up to 4.5 % water (related to the quantity of Selectmix C2) can be added. Experience has shown that the best results are achieved with the addition of approx. 1 % water (related to filler).

The ready to use mixture is poured on the prepared surface directly after mixing, distributed with suitable tools and smoothed.

Mixing ratio

71 : 29 parts by weight

Working time

Approx. 30 minutes at 20 °C and 60 % relative humidity. Higher temperatures reduce, lower temperatures increase working time.

Notes on working

Wear suitable protective equipment when working (see also Personal protective equipment).

Application method:

Depending on application, apply with a smoothing trowel or conventional tool for laying screeds (e.g. a screed blade).

Working temperature:

The temperature of the material, air and substrate should be at least 5 °C, max. 30 °C. Relative humid-

ity should not exceed 80 %. The temperature of the substrate 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, full mechanical loading capacity after 7 days. At lower temperatures or increased water content correspondingly longer.

It is not necessary to protect the surface from evaporation by covering with plastic sheets since this would only increase waiting time until the substrate can be covered.

Application examples

Wearing layer as of 10 mm:

The material filled up to 1:20 parts by weight is distributed and levelled to the correct height, compacted by smoothing and worked until the surface is uniform.

Application rate per mm thick layer: approx. 0.085 kg/m² Epoxy ESC 100 and 1.7 kg/m² Remmers Selectmix C2.

Levelling screed > 10 mm:

The material filled up to 1:25 parts by weight is distributed and levelled to the correct height, compacted by smoothing and worked until the surface is uniform.

Application rate per mm thick layer: approx. 0.07 kg/m² Epoxy ESC 100 and 1.7 kg/m² filler (e.g. screed sand 0 – 8 mm).

Tools, cleaning

Smoothing trowel, floor finish scraper, screed blade), mixing equipment and, if required, a positive mixer.

Further information is found in our tool programme.

Clean tools and any splashed material immediately, while fresh, with V 101 Thinner and hands with an appropriate cleaning agent (e.g. Vertulin Spezial).

Take suitable protective measures when cleaning (see also Personal protective equipment).

Personal protective equipment

Suitable nitrile rubber gloves (e.g. Tricotril made by KCL), protective glasses, splash protection, long-sleeved shirt or arm protectors.

Further information is found in our tool programme.

Notes

All of the values and application rates given were determined under laboratory conditions (20 °C) with standard shades of colour. When worked at the building site, these values may deviate slightly.

Suitable for vehicle traffic with rubber tyres; not suitable for vehicle loads with metal or polyamide tyres nor for dynamic point loads!

Abrasive, mechanical loads cause wear marks.

Epoxy resins are generally not colour stable when exposed to UV light or weather (see also BEB Work Sheet KH 05).

Further notes on working, system construction and maintenance of the products specified are found in the latest Technical Data Sheets and Remmers system recommendations.

Packaging, application rate, storage

Packaging:

Tin cans: 10 kg and 30 kg

Multi-chamber bag: 2 kg

Application rate:

Depending on application between 0.07 and 0.1 kg/m² per mm thick layer

Shelf-life:

At least 12 months in unopened 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 and the brochure "Epoxy Resins in the Building Industry and the Environment" issued by Deutsche Bauchemie e.V. (2nd edition, 2009).

GISCODE: RE 1

VOC content:

EU limit value for the product (Cat. A/j): max. 500 g/l (2010).
This product contains < 500 g/l


Emergency information:

Mon.-Thurs. from 7:30 a.m. to 4:00 p.m.; Friday from 7:30 a.m. to 2:00 p.m.

Product Safety Department:
Tel.: +49 (0)5432 83-138

After office hours:

Giftinformationszentrum-Nord
[Poison Information Centre-North]
24 h hotline +49(0)551 - 19 240

	
Remmers GmbH Bernhard-Remmers-Straße 13 D-49624 Lönningen 11 GBIII 022_4	
EN 13813:2002 6218 Synthetic resin screed for use internally in buildings	
Reaction to fire	E _{fl}
Release of corrosive substances	SR
Wear resistance	≤ AR1
Bond strength	≥ B1.5
Impact resistance	≥ IR4

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.



Remmers (UK) Limited Crawley
 United Kingdom
 Tel: +44 (0) 1293 594 010
 Fax: +44 (0) 1293 594 037
www.remmers.co.uk