



KÖSTER Construction Resin

2 component, solvent free universal epoxy primer and bonding agent

Features

KÖSTER Construction Resin is a solvent free universal epoxy binding agent which bonds excellently to all mineral substrates. It can be filled with kiln dried silica sand.

Technical Data

Viscosity	approx. 550 mPa · s (+ 20 °C)
Mixing ratio (by weight)	3:1
Pot life at	
+ 12 °C / + 23 °C / + 30 °C / + 40 °C	60 / 40 / 21 / 15 min.
Spec. gravity	1.1 g / cm ³
Application of next layer	after approx. 12 hours
Application temperature	min. + 10 °C
Compressive strength	approx. 60 N / mm ² dep. on filler material
Flexure tensile strength	approx. 30 N / mm ²

Fields of Application

KÖSTER Construction Resin can be used as a primer for mineral substrates and for preparing filling compounds for the subsequent coating with epoxy resins. Silica sand filled mortar is suitable for applying directly without priming as a levelling compound for rough surfaces and grinding tracks.

Substrate

All surfaces must be thoroughly cleaned and stripped down to a stable substrate before the application of KÖSTER Construction Resin. All surfaces to be coated must be sound and solid, dry, free of dust, loose particles, oil, grease, and other adhesion inhibiting substances.

Application

The A and B components are ideally tempered to + 15 °C before use. The components are mixed thoroughly at least 3 min. with a mechanical stirring device (below 400 rpm) until a homogeneous consistency is achieved.

To avoid defects due to insufficient mixing, re-temper the material after mixing for two minutes and mix for a further minute. The well conditioned and unfilled material is spread evenly using a rubber squeegee and intensively worked into the substrate using a short napped roller. The freshly coated surface can be broadcast with kiln dried silica sand, 0.4 – 0.8 mm, covering the whole area taking care not to apply an excess amount.

In cases of strongly absorbent substrates, a second priming layer or alternatively a troweled on levelling priming layer may be necessary.

Scrape-levelling compounds or spreadable levelling mortars are applied using a trowel or scraper and are also broadcast using kiln dried silica sand. Screeds are laid using guide rails, trowels, straight edges, or walk-behind trowels.

Consumption

300 – 500 g / m² total consumption
As primer on concrete floors.

Scrape-leveling compounds

1 : 1 filled with silica sand (grading curve 0.2 – 0.8 mm or 0.06 – 0.36 mm); consumption: 0.75 kg KÖSTER Construction Resin / m² per mm layer thickness, plus silica sand.

Levelling mortar

1 : 1.5 to 1 : 2.6 filled with kiln-dried silica sand (grading curve 0.06 – 0.36 mm); minimum layer thickness 3 mm; consumption: 0.5 – 0.6 kg KÖSTER Construction Resin / m² per mm layer plus silica sand.

Screed

1 : 8 to 1 : 12 filled with silica sand (grading curve 0.06 – 0.36 mm (33 %) and 0.35 – 1.5 mm (67 %)); consumption: 0.3 – 0.5 kg KÖSTER Construction Resin / m² per mm layer thickness, plus silica sand. The screed is applied into the previously applied priming coat "fresh on fresh".

In case a top coating is required, the fresh screed is broadcast with silica sand (recommended grading curve 0.06 – 0.36 mm) in order to achieve a good adhesion between layers.

Suggested formulation for 1 cm layer thickness :

- 1 Part = 1.7 kg KÖSTER Construction Resin
- 3 Parts = 5.1 kg fine silica sand (for example 0.06 – 0.36 mm) and
- 6 Parts = 10.2 kg coarse sand (for example 0.35 – 1.5 mm)

Drainage mortar

As drain mortar, per 25 kg quartz sand (grading curve 2 – 3 mm) add 1 kg of KÖSTER Construction Resin. The material must be installed in a minimum layer thickness of 4 cm. The above mentioned mixture when compacted builds a layer thickness of approx. 1.6 cm.

Attention

Used fillers (quartz sand) must be kiln dried sand. These are to be added into the already mixed material. The maximum grain size of the filler should not exceed 1/3 of the layer thickness.

Cleaning

Clean tools immediately after use with KÖSTER Universal Cleaner.

Packaging

CT 165 025 25 kg combipackage

Storage

Store the material frost-free at temperatures between + 10 °C and + 25 °C. In originally sealed packages it can be stored for a period of 12 months.

Safety

Wear protective gloves and goggles when processing the material. Attention: The filler materials must be kiln dried. They must be added to the A-component only. Only then the B-component is mixed in. The maximum grain size should not exceed 1/3 of the layer thickness.

The information contained in this technical data sheet is based on the results of our research and on our practical experience in the field. All given test data are average values which have been obtained under defined conditions. The proper and thereby effective and successful application of our products is not subject to our control. The installer is responsible for the correct application under consideration of the specific conditions of the construction site and for the final results of the construction process. This may require adjustments to the recommendations given here for standard cases. Specifications made by our employees or representatives which exceed the specifications contained in this technical guideline require written confirmation. The valid standards for testing and installation, technical guidelines, and acknowledged rules of technology have to be adhered to at all times. The warranty can and is therefore only applied to the quality of our products within the scope of our terms and conditions, not however, for their effective and successful application. This guideline has been technically revised; all previous versions are invalid.

During application, there must be a temperature difference to the dew point of at least +3 °C. Liquid polymers react to temperature fluctuations by changing their viscosity and/or curing behavior. The instructions given in the Technical Guidelines must be followed. Low temperatures will slow the reaction; high temperatures will increase the reaction rate. Mixing large volumes will also increase the reaction rate. Observe all governmental, state, and local safety regulations when processing the material. For professional use only.

Related products

KÖSTER LF-BM	Prod. code CT 160
KÖSTER EM-VS	Prod. code CT 210 008
KÖSTER LF-VL	Prod. code CT 271
KÖSTER TS transparent	Prod. code CT 320
KÖSTER Color-Chips	Prod. code CT 429
Quartz Sand 0.35 - 1.50 mm	Prod. code CT 481
Quartz Sand 0.06 - 0.36 mm	Prod. code CT 483
Quartz Sand 0.7 - 1.2 mm	Prod. code CT 485
Quartz Sand 1.0 - 2.0 mm	Prod. code CT 486
Quartz Sand 2.0 - 3.0 mm	Prod. code CT 487
Quartz Sand 0.4 - 0.8 mm	Prod. code CT 488
KÖSTER Universal Cleaner	Prod. code X 910 010

The information contained in this technical data sheet is based on the results of our research and on our practical experience in the field. All given test data are average values which have been obtained under defined conditions. The proper and thereby effective and successful application of our products is not subject to our control. The installer is responsible for the correct application under consideration of the specific conditions of the construction site and for the final results of the construction process. This may require adjustments to the recommendations given here for standard cases. Specifications made by our employees or representatives which exceed the specifications contained in this technical guideline require written confirmation. The valid standards for testing and installation, technical guidelines, and acknowledged rules of technology have to be adhered to at all times. The warranty can and is therefore only applied to the quality of our products within the scope of our terms and conditions, not however, for their effective and successful application. This guideline has been technically revised; all previous versions are invalid.