KÖSTER
Waterproofing Systems

KÖSTER Construction Resin

Technical Data Sheet CT 165 025

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2 component, solvent free universal epoxy primer and bonding agent

CE	**KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich 20 CT 165 EN 13813:2002 Synthetic resin for internal uses**
Reaction to fire	Efl
Release of corrosive substances	SR
Water permeability	NPD
Wear resistance	≤ AR 0,5
Bond strength	≥ B 2,0
Impact resistance	Klasse 1
Sound insulation	NPD
Sound absorption	NPD
Thermal resistance	NPD
Chemical resistance	NPD
Dangerous substances	NPD

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, repot 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 / m^2 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 / m^2 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 / m^2 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 / m^2 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.

CT - Coatings

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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. 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

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