

## KÖSTER Restoration Slurry

Technical guideline / Article number **3.025**

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### Surface coating for sulphate damaged wall and floor surfaces and for protection against sulphate containing ground water

#### Features

KÖSTER Restoration Slurry is a hydraulically reacting powder for sealing surfaces against ground moisture, non-pressurised and pressurised water up to 5 m head. KÖSTER Restoration Slurry penetrates deeply into the substrate, fills or plugs capillaries and is frost and seawater resistant after full cure. It is free of soda and chlorides. The material possesses high mechanical strength and is resistant to chemical and mechanical stress. The coating is alkali reactive and highly resistant against sulphates, it can be stressed early and it prevents efflorescence.

Due to the deep penetration into the substrate, easily soluble salts are transformed into hardly soluble and thus harmless compounds.

Coatings made of KÖSTER Restoration Slurry should only be applied to structures which are free of cracks and which are unlikely to crack in future. If this is not the case, adequate precautions have to be taken.

#### Technical data

Density of the fresh mortar	1,9 kg / l
Compressive strength (7 days)	>20 N / mm <sup>2</sup>
Compressive strength (28 days)	> 35 N / mm <sup>2</sup>
Flexural tensile strength (7 days)	> 5,0 N / mm <sup>2</sup>
Flexural tensile strength (28 days)	> 5,5 N / mm <sup>2</sup>
Adhesive tensile strength	> 1,5 N / mm <sup>2</sup>
Pot life	approx. 2 hours
Resistant to pedestrian traffic	approx. 24 weeks
Full cure	approx. 2 weeks

#### Field of application

KÖSTER Restoration Slurry is suited for sealing horizontal and vertical areas on all mineral substrates e. g. concrete, masonry, cementitious plaster. It is also suited for sealing new basements, tanks, underground car parks, silos, sewage treatment plants, manholes, etc..

#### Preparation of substrate

The mineral substrate has to be level, clean and sound. Substances which affect adhesion adversely e. g. bitumen, paint, oil, etc. have to be removed mechanically or with other suited procedures. External

corners and edges have to be chamfered; internal corners are rounded out with fillets made of KÖSTER Repair Mortar prior to application. Pre-wet thoroughly. Strongly absorbent substrates have to be primed with KÖSTER Polysil® TG 500.

#### Application

Mix KÖSTER Restoration Slurry with clean water into a homogeneous, creamy, easily spreadable mass. Add the powder into the water.

The slurry has to be applied with a firm brush in at least two coats. Between layers, a waiting time of min. 3 hours and max. 24 hours must be observed. The application temperature must be min. + 5°C.

The regulations of DIN 1045 have to be observed which means that exposure to heat, frost and strong wind has to be avoided during application and for at least 24 hours after application.

#### Mixing ratio

Per 25 kg bag approx. 8 l water are needed

#### Consumption

Protection against ground moisture:	min. 2 kg / m <sup>2</sup> (2 coats)
Protection against non-pressurised water:	min. 3 kg / m <sup>2</sup> (2 coats)
Protection against pressurised water:	min. 4 kg / m <sup>2</sup> (3 coats)

#### Storage

Store the material dry; in originally sealed packages, it can be stored for 12 months.

#### Packaging

25 kg bag

#### Please note

Treated surfaces - which will be plastered or tiled later on - have to be coated with a bonding bridge or with a plaster key using the KÖSTER SB-Bonding Emulsion.



#### **Safety precautions**

The material contains cement. It reacts alkaline. Thus, protect skin and eyes during processing. After contact, rinse off material thoroughly with water.

#### **Technical guidelines cited**

KÖSTER SB Bonding Emulsion	Art.-No.	2.11
KÖSTER Polysil® TG 500	Art.-No.	4.011
KÖSTER Repair Mortar	Art.-No.	5.303

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.