

## KÖSTER Silicate Mortar

Technical guideline / Article number **5.15**  
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- Official test certificate of the MFPA Leipzig

### 2 comp. silicate-based highly chemical-resistant mortar

#### Features

KÖSTER Silicate Mortar is a special mineral mortar on the basis of silicates with a very high resistance to acids. The fully cured mortar possesses a very high compressive strength and a high resistance to abrasion.

#### Technical data

Base	powder component	Cement-free powder-mixture of quartz and inorganic additives
	liquid component	Watery silicate solution
Max. grain size in powder		0.4 mm
pH value liquid component		Approx. 11
Range of application		pH 0 to 7
Pot life at 15 °C		45 min
Specific gravity (ready mixed)		2.1 g/ cm <sup>3</sup>
Compressive strength: (after 24 h)		>15 N/mm <sup>2</sup>
Flexural tensile strength: (after 24 h)		1.4 N/mm <sup>2</sup>
Long term resistant against		Salts which harm building substance, oils, greases, acids (down to pH 0)

#### Field of application

KÖSTER Silicate Mortar can be used for sealing horizontal and vertical surfaces of all mineral substrates such as concrete, masonry and cement plaster in moist- and wet-rooms, in areas, which are exposed to increased chemical stresses by acids, and for heavy duty corrosion protection.

#### Substrate preparation

The mineral substrate has to be flush, clean, sound and solid. Substances that can affect bonding adversely such as bitumen, paint, oil, dust, cement slurry and so on must be removed mechanically. Damaged concrete must be removed down to the solid base layer. The substrate has to have a minimum adhesive tensile strength of 1.5 N/mm. In cases where substrates have previously been damaged by acids, it is necessary to apply a layer of KÖSTER NB 1 Grey sealing slurry without additive of KÖSTER SB Bonding Emulsion "Concentrate" to the substrate. The sealing slurry has to cure for at least 24 hours (at 15 °C) before KÖSTER Silicate Mortar can be applied.

#### Application

The substrate should be wetted so that it is matt moist (not necessary in case of substrate preparation with KÖSTER NB 1 Grey).

Mix KÖSTER Silicate Mortar in the required mixing ratio in a clean container to a plastic mortar using a suited mixer (recommended is the use of a double basket-shaped agitator). Add the powder component in portions into the liquid component and mix in each portion separately. The material is applied using a plastering trowel in a maximum layer thickness of 5 mm in one work step. The application is done in multiple layers fresh in fresh.

KÖSTER Silicate Mortar is cement free, do not add water. Material that has started to set may not be mixed up for use again. The mortar must be protected from moisture- or water-access for at least 24 hours.

#### Cleaning of the tools

Immediately after use with water.

#### Consumption

Approx. 2.1 kg/ m<sup>2</sup> per mm layer thickness

#### Storage

If stored in a dry place in originally sealed bags / jerry cans, the material can be stored up to 12 month.

#### Packaging

Powder component	24 kg bag
Liquid component	5.5 kg jerry can

#### Safety precautions

The liquid component contains silicate and acts caustic when coming into contact with skin, eyes or the mucous membrane.

#### Technical guidelines cited

KÖSTER NB 1 Grey Art.-Nr. 3.021

The accurate and thereby effective and successful application of our products is not subject to our control. The guarantee can therefore only be applied to the quality of our products within the scope of our terms and conditions, not, however, for their effective and successful application. These guidelines replace all previous ones.