

## KÖSTER Polysil® TG 500

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### Deeply penetrating primer for damp and salt-containing substrates Liquid hardener for sealing slurries

#### Description

KÖSTER Polysil® TG 500 is a thin fluid product based on a polymer and silicate combination. On salt-containing and on damp substrates, it leads to a reduction of the pore volume and thus decreases the danger of new development of salt efflorescence. It also increases the chemical and mechanical resistance of mineral building materials. Depending on the substrate, the product penetrates the surface up to 2 cm deep. KÖSTER Polysil® TG 500 also has strengthening and hydrophobing properties. The material is compatible with mortars, plasters, cementitious slurries and with concrete.

#### Field of application

KÖSTER Polysil® TG 500 is used to strengthen and to protect mineral substrates and to reduce their absorbency, even of such problematic building materials as sandstone. KÖSTER Polysil® TG 500 decreases the danger of new development of salt efflorescence and raises the resistance of mineral substrates to freezing and thawing. KÖSTER Polysil® TG 500 can also be used to harden sealing slurries. It does not cause shell building. All mineral substrates are suited for application (except for gypsum). Furthermore, KÖSTER Polysil® TG 500 can be used as primer underneath subsequent layers of plastic-modified bitumen thick film sealants such as KÖSTER Deuxan® 2C Extratight, KÖSTER Bikuthan® 2C Supertight and so on.

#### Substrate

KÖSTER Polysil® TG 500 can be applied to weakly and to strongly absorbing, to dry and to moist substrates. The substrate has to be free of oil and loose particles. Salt efflorescence must be removed prior to application of KÖSTER Polysil® TG 500 e. g. by brushing.

#### Application

Deeply penetrating priming:

KÖSTER Polysil® TG 500 can be brushed or sprayed on. During the curing time, the surrounding and substrate temperature must not fall below 0 °C. Salts which came through the surface of the substrate during the curing process must be removed by brushing. After full cure, no more salts will come to the surface.

Waterproofing from the inside using rigid sealing slurries

In order to construct extremely resistant coatings using KÖSTER NB I Grey, the substrate is first primed with KÖSTER Polysil® TG 500 and is, after approx. 30 minutes, covered with KÖSTER NB I Grey (without addition of KÖSTER SB-Bonding Emulsion "Concentrate"). Immediately after applying the slurry, it is coated with KÖSTER Polysil® TG 500. After a short setting time, another slurry coat is applied which is then immediately hardened with KÖSTER Polysil® TG 500.

#### Surface protection

To strengthen and improve the chemical and mechanical resistance of mineral building materials, KÖSTER Polysil® TG 500 is sprayed, rolled or brushed onto the substrate (Consumption approx. 130 – max. 200 g/m<sup>2</sup>). The protective coating is fully resilient after approx 16 hours.

#### Consumption

As deep penetrating primer: approx. 100 to 130 g / m<sup>2</sup>  
Double this amount is possible on strongly absorbent substrates

As hardener of slurries: approx. 200 to 250 g / m<sup>2</sup>

Under bituminous thick film sealants: approx. 150 g / m<sup>2</sup>  
Double this amount is possible on strongly absorbent substrates

#### Cleaning of tools

Clean tools immediately after use with water.

#### Packaging

10 kg jerry can, 1 kg bottle

#### Storage

If the material is stored in originally sealed containers in a cool and frost-free place, it can be stored for approx. 12 month.

#### Safety precautions

Wear protective gloves and goggles during application.