



## KÖSTER Polysil TG 500

Technical Data Sheet / Prod. code M 111

Issued: 2015-02-05

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

#### Features

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.

#### Technical Data

Application temperature	min. 5 °C
Specific gravity	1.03 g/cm <sup>3</sup>
Surface	transparent, slightly sticky

#### Application of next layer:

- after 30 minutes - cementitious building materials
- after min 24 hours - acrylate and silicate paints

#### Fields 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 polymer-modified bitumen thick film sealants such as KÖSTER Deuxan 2C, KÖSTER Bikuthan 2C.

#### 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 1 Grey, the substrate is first primed with KÖSTER Polysil TG 500 and is, after approx. 30 minutes, covered with KÖSTER NB 1 Grey (without addition of KÖSTER SB-Bonding Emulsion). 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

Approx. 0.1 - 0.13 kg/m<sup>2</sup> depending on substrate, approx. 0.2 - 0.25 kg/m<sup>2</sup> for hardening of slurries.

On strongly absorbent substrates the consumption can be higher accordingly.

#### Cleaning

Clean tools immediately after use with water.

#### Packaging

M 111 001	1 kg bottle
M 111 010	10 kg jerrycan

#### Storage

Store the material cool but frost-free; in originally sealed packages, it can be stored for a minimum of 12 months.

#### Safety

Wear protective gloves and goggles during application.

#### Related products

KÖSTER Adhesive Mortar	Prod. code B 530 033
KÖSTER Repair Mortar NC	Prod. code C 535 025
KÖSTER Hydrosilicate Adhesive SK	Prod. code M 170 020
KÖSTER Restoration Plaster 1 Grey	Prod. code M 661 025
KÖSTER Restoration Plaster 2 White	Prod. code M 662 030
KÖSTER Restoration Plaster 2 Fast	Prod. code M 663 025
KÖSTER Restoration Plaster 2 Light	Prod. code M 664 025
KÖSTER Restoration Plaster 2 Fast	Prod. code M 665 025
KÖSTER Restoration Plaster E Grey	Prod. code M 668
KÖSTER Hydrosilicate Board	Prod. code M 670
KÖSTER MF 1	Prod. code P 280
KÖSTER Elastic Roof	Prod. code R 238 015
KÖSTER Dachflex	Prod. code R 260 020
KÖSTER NB 1 Grey	Prod. code W 221 025
KÖSTER NB 2 White	Prod. code W 222 025

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.

KÖSTER NB 1 Fast	Prod. code W 223 025
KÖSTER Restoration Slurry	Prod. code W 225 025
KÖSTER NB Elastic Grey	Prod. code W 233 033
KÖSTER NB Elastic White	Prod. code W 234 033
KÖSTER NB 4000	Prod. code W 236 020
KÖSTER Bikuthan 2C	Prod. code W 250 028
KÖSTER Deuxan 2C	Prod. code W 252 032

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.