



# KÖSTER Polysil TG 500 2C

Technical Data Sheet CT 117

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## 2 component low viscosity epoxy primer and sealant for the mechanical protection of concrete civil engineering structures

### Features

KÖSTER Polysil TG 500 2C is a low viscosity 2 component epoxy sealant for the protection of concrete surfaces in civil engineering structures.

### Technical Data

Viscosity	approx. 120 mPa·s (+ 20 °C)
Mixing ratio (by weight)	3.4 : 2
Pot life at + 20 °C	20 min.
Spec. Gravity component A	1.06 g / cm <sup>3</sup>
Spec. Gravity component B	1.05 g / cm <sup>3</sup>
Application of next layer	after approx. 24 hours
The material develops its full mechanical and chemical resistance after 7 days (at + 23 °C and 65 % relative humidity).	
Color	Transparent
Application temperature	min. + 5 °C and min. 3° C above dew point
Waterproof	at 1 bar over 48 hours no leakage
Adhesive tensile strength (moist concrete)	> 1.5 N / mm <sup>2</sup>

### Fields of Application

KÖSTER Polysil TG 500 2C is used to coat civil engineering structures made of concrete against mechanical damage. It is used to prime and seal concrete surfaces. The material increases the abrasion resistance of concrete significantly.

In KÖSTER corrosion protection systems the material is used on concrete as an abrasion resistant coating. KÖSTER Polysil TG 500 2C creates an excellent bonding bridge between concrete and asphalt. In this case the asphalt should not exceed a maximum temperature of + 210° C.

### Substrate

All surfaces must be thoroughly cleaned and stripped down to a stable surface before the application of KÖSTER Polysil TG 500 2C. Normal concrete surfaces can be cleaned with sandblasting. High-strength concrete or vacuum-smoothed concrete with extremely smooth and very dense surfaces requires shot blasting as surface preparation. The aggregate embedded into the concrete has to be visible on the surface. All surfaces to be coated must be sound and solid, dry to slightly moist, free of dust, loose particles, oil, grease, and other adhesion inhibiting substances. The adhesive tensile strength of the substrate must be at least 1.5 N / mm<sup>2</sup>. KÖSTER NB 1 Grey can be applied underneath KÖSTER Polysil TG 500 2C. This acts to smooth the surface, fill blowholes in the concrete, and to provide a known substrate for the application of KÖSTER Polysil TG 500 2C, (consumption 1.5 kg / m<sup>2</sup>). KÖSTER Repair Mortar NC can be used to fill voids and create fillets.

### Application

Both components are mixed thoroughly using an electrical mixing device (below 400 rpm) until a homogeneous consistency is reached. Mix for a minimum of three minutes. Use the KÖSTER Resin Stirrer for mixing. To avoid defects due to insufficient mixing, re-pot the material after mixing for two minutes and mix for a further minute. Special care is to be taken that material sticking to the sides of the mixing vessel is mixed in. The material has to have a temperature between + 10 °C and + 25 °C before mixing.

The well mixed material is spread evenly using a brush, roller, squeegee, or suitable spraying equipment. KÖSTER Polysil TG 500 2C is applied in one layer with a consumption of approximately 200 g / m<sup>2</sup>. On vertical substrates it may be necessary to apply more than one coat to achieve the required layer thickness. During application, there must be a temperature difference to the dew point of at least +3 °C, (a dew point table is available at [www.koester.eu](http://www.koester.eu)).

### Consumption

Approx. 0.2 kg / sqm

### Cleaning

Clean tools immediately after use with KÖSTER Universal Cleaner. Hardened material must be mechanically cleaned.

### Storage

Store the material frost-free at temperatures between + 5 °C and + 25 °C. In originally sealed packages it can be stored for a minimum of 12 months.

### Safety

Wear protective gloves and goggles when processing the material. Adhere to all governmental, state, and local safety regulations when processing the material.

### Related products

KÖSTER Repair Mortar NC	Prod. code C 535 025
KÖSTER VE	Prod. code CT 286 006
KÖSTER NB 1 Grey	Prod. code W 221 025
KÖSTER Universal Cleaner	Prod. code X 910 010

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.

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