



## KÖSTER Injection Barrier

**Technical Data Sheet IN 501 025** 

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# Ultra fast curing cementitious barrier with high early strength to seal mineral surfaces injection of areas e.g. with KÖSTER Injection Gel G4

#### **Features**

KÖSTER Injection Barrier is an ultra-fast curing 2-component mortar used to create a cementitious layer to prevent the loss of injection material during area injection e.g. with KÖSTER Injection Gel G4.

The mortar can be applied either by brush or trowel and has exceptional early strength development. After application of KÖSTER Injection Barrier, masonry can be injected already after 60 minutes. With the addition of KÖSTER Mortar Boost to the powder component, the consistency can be varied within the first 20 minutes from firm to plastic depending on the amount of the added liquid component.

Due to its high concentration of polymer, KÖSTER Injection Barrier has a very high adhesive strength to the substrate. KÖSTER Injection barrier cures free of tension and shrinkage. Adding KÖSTER Turbo additives to the mixture can accelerate or delay the setting time.

#### **Technical Data**

Pot life at 20 °C	30 min
Setting time / injectable after at 20	after 60 min
°C	
Compressive Strength (1 h)*	$>10 \text{ N} / \text{mm}^2$
Compressive Strength (3 h)*	$>20 \text{ N} / \text{mm}^2$
Compressive Strength (1 day)*	$>30 \text{ N} / \text{mm}^2$
Compressive Strength (7 days)*	$>35 \text{ N} / \text{mm}^2$
Compressive Strength (28 days)*	$>40 \text{ N} / \text{mm}^2$
Tensile Strength (1 day)	$> 6 \text{ N} / \text{mm}^2$
Tensile Strength (28 days)	$>10 \text{ N} / \text{mm}^2$
Compressive strength (7 days)	$> 15 \text{ N} / \text{mm}^2$
Density of fresh mortar	1.9 kg / l
Max. layer thickness	30 mm

### Fields of Application

\*= after curing with 18% KÖSTER Mortar Boost

KÖSTER Injection Barrier is used to create cementitious layers on mineral surfaces such as masonry, concrete and plasters in order to create a barrier against outflow of injection products.

KÖSTER Injection Barrier is applied either before the drilling of boreholes or after the installation of packers. When applied after the installation of packers, KÖSTER Injection Barrier is applied around the packers using a trowel or a small brush.

KÖSTER Injection Barrier provides an excellent substrate for the application of further cementitious products such as restoration plasters.

#### Substrate

The substrate needs to be clean, free of loose particles as well as free of oil or grease. KÖSTER Injection Barrier can be installed on all mineral substrates. The substrate needs to have a min. bonding strength of 1.5 N/mm². In substrates with lower strength, spalling due to the generated injection pressure cannot otherwise be ruled out.

Substrates have to be wetted (avoid standing water) or treated with KÖSTER Polysil TG 500 prior to the application of KÖSTER Injection Barrier.

#### **Application**

25 kg of KÖSTER Injection Barrier (cementitious powder component) are mixed with 4.0 - 4.5 Liter of KÖSTER Mortar Boost (liquid component). The liquid component is poured into a clean mixing vessel and the powder is added while continually mixing using a slow speed mechanical compulsory mixer (under 400 rpm). Mix until a homogeneous, lump-free consistency is reached. Mixing time is approx.3 minutes. KÖSTER Injection Barrier is applied immediately after mixing. The material is usually applied in a minimum layer thickness of 2 mm. It is also used to level the surface where necessary.

#### Consumption

Approx. 1.8 kg/mm/m<sup>2</sup>

#### Cleaning

Clean tools immediately after use with water.

#### **Packaging**

IN 501 025 25 kg bag

#### Storage

Store the material in a dry environment. In originally sealed packages, the material can be stored for a minimum of 12 months.

#### Safety

Wear protective gloves and goggles when processing the material.

#### Related products

KÖSTER Turbo Super Plasticizer	Prod. code C 717 065
KÖSTER Turbo Retarding Agent	Prod. code C 718 025
KÖSTER Mortar Boost	Prod. code C 791 010
KÖSTER Injection Gel G4	Prod. code IN 290
KÖSTER Injection Gel S4	Prod. code IN 294
KÖSTER Polysil TG 500	Prod. code M 111

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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