

# KÖSTER

## NB 1 Sealing Slurry grey

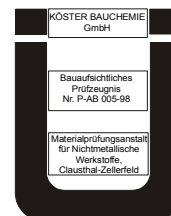
Tech. Leaflet /Product Code **3.021**

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Off. Test Certificate, Institute for Hygiene, Gelsenkirchen – Container and Container Coatings, following the regulations of the DVGW, Tech. Regulations Work Sheet W 270, Dec. 1990, on the multiplication of micro-organisms on materials for the drinking water surroundings

Off. Test Certificate, Institute for Hygiene, Gelsenkirchen – Container and Container Coatings, following the recommendations of the study group

"Trinkwasserbelange" (drinking water interests) of the commission on synthetics of the Federal Health Office



Test Certificate of the MPA Clausthal – Zellerfeld  
by the respective supervisory authority

## ACTIVE, IN-DEPTH AND CRYSTALLISING CEMENT BASED WATERPROOFING SYSTEM

### DESCRIPTION

The KÖSTER NB 1 Sealing Slurry grey is a mineral coating with excellent capillary sealing properties. It contains crystallising agents which penetrate deep to fill the voids and capillaries and that react with moisture and ingredients in the substrate to form crystals and thus creating the waterproofing effect, to seal off ground moisture, non-pressurised and pressurised water – on both the positive and the negative side. The KÖSTER NB I Sealing Slurry becomes an integral part with the substrate itself. Once applied to the substrate, it leaves a coating with excellent pressure- and abrasion resistance and has excellent resistance to chemical compounds.

NB 1 should only be used on substrates that are free of cracks.

Adding of SB-Bonding Emulsion increases the water retentivity and thus prevents dehydration under unfavourable weather conditions (warm, dry, draught), which may cause cracks in the coating. SB-Bonding Emulsion makes the NB-Sealing Slurry I grey more flexible thus improving its resistance to thermal movements. Because Köster NB I Sealing Slurry reacts with the free lime in the substrate, it uses the strength and decreased porosity of the substrate to create its waterproofing effect; it can be used on both positive and negative side.

### TECHNICAL DATA

Compressive strength	25.6 N / mm <sup>2</sup>
Flexure tensile strength	6.2 N / mm <sup>2</sup>
Bonding strength	1.1 N / mm <sup>2</sup>
Coefficient of water vapour diffusion resistance	60
Positive side water permeability	140 m water head (14.06 bar)
Negative side water permeability	140 m water head (14.06 bar)
Pot life (20° C)	app. 2 hours
Resistant to foot traffic	after app. 2 days
Curing process completed	after app. 2 weeks

### FIELD OF APPLICATION

The NB-Sealing Slurry I grey seals horizontal and vertical surfaces made of concrete, masonry or cementitious plaster (only positive side) in damp rooms, bathrooms, shower rooms, new basements, containers, swimming pools, silos, sewage plants, shafts, retaining walls, planters etc. Köster NB I Sealing Slurry can be used on both positive and negative side, provided that access to the base substrate is possible (e.g. the internal wall of a basement is stripped off plaster for treatment directly on the base wall).

The above mentioned information and instructions are given to the best of our knowledge and belief based on tests and our long experience in this field. A correct and successful application is not subject to our control. Therefore, a guaranty can only be given for the quality of our products within our normal business terms but not for a successful application. With this technical leaflet previous ones are no longer valid.

#### PREPARATION OF SUBSTRATE

The surface has to be sound and solid, free of laitance, paint, form oil and other contaminants that might affect the bonding adversely. This also includes plasters and skim coats where the bond strength cannot be verified. Suitable tools and methods are wire brushes, high-pressure water jets, sand and shot blasting. Cracks and surface honeycombs should be chiselled open so that application of an even uniform coat can be achieved. Cracks and depressions larger than 5 mm should be filled with Köster Repair Mortar and be left for curing for at least 24 hours. For improved bonding, strengthening and water resistance, we always recommend the use of Köster Polysil. Substrates should always be well saturated with water before commencing with the application of Köster NB I. Wet down the substrate thoroughly before applying NB I.

#### APPLICATION

Add one 25 kg bag of Köster NB I to a mixture of 6l water and 2 l Köster SB Bonding Emulsion (app.10 kg KÖSTER NB I : 3 – 3.5 l water). Mix the material with a slow speed mixer. To avoid pinholes always apply Köster NB I in 2 or more layers. Follow the regulations of DIN 1045; i.e. avoid heat, frost and strong wind impact during the application and at least 24 hours afterwards. NB I should be applied using a MAUTROL® Brush or a masons brush. NB I can also be spray applied with suitable equipment. Do not add any extra water to the mixed slurry, the consistency should be thick and yet applicable with brush.

#### SPECIAL FIELD OF APPLICATION

##### Highly efficient waterproofing with bituminous construction material

When combining Köster NB I with a crack-bridging bituminous system, the properties and advantages of both systems are complimented. Thus combining a tremendous surface bond, deep penetration, crystallising and pore filling properties with dynamic crack-bridging properties of the bituminous system. Apply NB I directly to the well prepared substrate and let it cure for 24 hours before applying the bituminous coating (BIKUTHAN 1C and 2C, DEUXAN 2C and KBE Liquid Film). The priming layer of NB I reduces the risk of bubble formation of bituminous construction materials on porous substrates and reduces the risk of backflow on problematic wall /floor junctions.

#### CONSUMPTION

protection from ground moisture: min. 2 kg / m<sup>2</sup> (2coats)  
 protection from non-pressurised water: min. 3 kg / m<sup>2</sup> (2 coats)  
 protection from pressurised water: min. 4 kg / m<sup>2</sup> (2-3 coats)

Combined system with bituminous construction materials:

Consumption: min. 2 kg/m<sup>2</sup> (1 coat)

#### CLEANING OF TOOLS

With water immediately after use.

#### PACKAGING

25 kg PE lined paper bag

#### STORAGE

Dry in unopened bags.

#### SHELF LIFE

12 months in unopened bags.

#### SAFETY PRECAUTIONS

Wear protective gloves and goggles during application.

#### References were made to the following technical leaflets:

KÖSTER SB-Bonding Emulsion	2.11
KÖSTER Polysil	7.13
KÖSTER KBE Liquid Film	1.13
BIKUTHAN 2C	1.14
BIKUTHAN 1C	1.15
DEUXAN 2C	1.16

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