



KÖSTER Mautrol Liquid Sealant

Technical Data Sheet M 241

Issued: 2019-10-08

- Official certificate of inspection, AMPA, Hanover – damp proofing
- Industry classification "MAUTROL" registered at the German patent office, K 50 862
- Capillary rods - German patent Nr. 43 06 687

Silicifying liquid for waterproofing against rising damp

Features

KÖSTER Mautrol Liquid Sealant is a very thin, deeply penetrating silicifying liquid with hydrophobing effect. It effectively seals off rising damp. The material is injected via boreholes into the masonry. It spreads into the capillaries of the construction material and it reacts to form insoluble and water repellent compounds.

Besides the hydrophobing effect, KÖSTER Mautrol Liquid Sealant considerably strengthens and solidifies mineral construction members. KÖSTER Mautrol Liquid Sealant does not attack steel reinforcement.

The suction angle system allows for quick and safe waterproofing against rising damp. The system's most important feature is its special adaptability to the specific requirements of the project at hand. Using the suction angle system,

- the depth of the drill hole is reduced.
- the actual required drill depth can be exactly calculated and adhered to.
- the horizontal barrier can be placed directly in the horizontal joint between the first and second row of bricks.
- the holes can all be drilled from one side, even in case of greater wall thicknesses.
- time and material are saved.

Technical Data

| | |
|----------------|---|
| Viscosity | approx. 80 mPa·s |
| Type of effect | narrowing of pores / hydrophobing of pore walls |
| pH-value | approx. 11 |
| Density | 1.16 g / cm ³ |

Fields of Application

KÖSTER Mautrol Liquid Sealant is used to seal off rising damp in masonry up to a concentration of approx. 1 % (by mass) salt content and 50 % moisture content (equals approx. 5 – 8 % water contents by mass). KÖSTER Mautrol Liquid Sealant can be applied to all types of masonry except for those that contain loam mortars.

Application

KÖSTER Mautrol Liquid Sealant is applied using the following systems:

- KÖSTER Suction Angle System for horizontally applied waterproofing
- KÖSTER Cartridge System for diagonally applied waterproofing

Application as Cartridge System

Depending on the thickness of the wall, holes are drilled into the masonry at a distance of max. 12.5 cm from each other (see the table overleaf) with a diameter of 14 mm and at an angle of approx. 30° (to a depth of approx. 5 cm less than the thickness of the wall). The holes are flushed out with clean water or blown clear with pressurised air. If a subsequent horizontal barrier is to be installed in a lime-free substrate -

such as tuff or non-alkaline, old masonry - the boreholes are filled with lime water after cleaning.

Case 1: Masonry free of voids and cracks: After drilling the holes, the cartridges are put in place and are left in the masonry until they are completely empty.

Case 2: Masonry free of voids, but cracked or very porous masonry: In the cleaned boreholes, KÖSTER Capillary Rods are inserted so that approximately the first 4 cm of the borehole are left clear. Then the KÖSTER Capillary Rods are saturated with clean water. After that, the cartridges are put in place and are left in the masonry until they are completely empty. The capillary rods can remain in the masonry after application of the material.

Case 3: Masonry with voids: The boreholes are filled with KÖSTER Micro grout 1C and are drilled open after a setting time of approximately 30 minutes up to a maximum of 3 hours. Then the cartridges are put in place and are left there until they are completely empty. After the waterproofing is done, the boreholes are closed with KÖSTER KB-Fix 5.

| Wall thickness including interior and exterior plaster | diameter of drill holes | Drill holes per m | Distance between drill holes (center to center) | Cartridge s per m | Cartridge s per drill hole | Consumption of capillary rods |
|--|-------------------------|-------------------|---|-------------------|----------------------------|-------------------------------|
| | mm | unit | cm | unit | unit | unit per m |
| up to 10 cm | 14 | 8 | 12.5 | 8 | 1 | 2 |
| up to 20 cm | 14 | 8 | 12.5 | 8 | 1 | 4 |
| up to 30 cm | 14 | 8 | 12.5 | 8 | 1 | 5 |
| up to 40 cm | 14 | 9 | 11.0 | 9 | 1 | 7 |
| up to 50 cm | 14 | 11 | 9.0 | 11 | 1 | 11 |

Please note: For wall thicknesses above 24 cm we recommend the KÖSTER Suction Angle System

Application with the KÖSTER Suction Angle System (masonry with cracks and voids)

Drill horizontal holes (14 mm diameter) according to the table overleaf in the lowest horizontal joint with a depth of 5 cm less than the thickness of the masonry and clean the holes by flushing with compressed air or briefly with water. The KÖSTER Capillary Rods are measured and cut at least 7 cm longer than the depth of the drill hole. Now insert the end of the capillary rod into the suction angle's supply tank and then push the capillary rod and the suction angle together into the drill hole so that the suction angle is securely stuck in the hole. (The suction angles are reusable.) Now fill the supply tank with water twice in short intervals in order to achieve a rapid swelling of the capillary

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Waterproofing Systems

M - Restoration of masonry

rods. After about 15 minutes, place the KÖSTER Mautrol Liquid Sealant Cartridges in the suction angle's clamping device, so that a firm contact to the capillary rod is achieved. Assembly illustration: Remove the cartridges after approximately 12 - 48 hours (when completely empty). After the injection, the capillary rods can remain in the masonry. Protruding ends can be pulled out and cut off so that the drill holes can be closed with KÖSTER KB-Fix 5.

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

Related products

| | |
|--|-----------------------|
| KÖSTER KB-FIX 5 | Prod. code C 515 015 |
| KÖSTER Micro Grout 1C | Prod. code IN 295 024 |
| KÖSTER Polysil TG 500 | Prod. code M 111 |
| KÖSTER Fine Plaster | Prod. code M 655 025 |
| KÖSTER Restoration Plaster Grey | Prod. code M 661 025 |
| KÖSTER Restoration Plaster White | Prod. code M 662 025 |
| KÖSTER Restoration Plaster White/Fast | Prod. code M 663 |
| KÖSTER Restoration Plaster White/Light | Prod. code M 664 020 |
| KÖSTER Suction Angle | Prod. code M 930 001 |
| KÖSTER Capillary Rods | Prod. code M 963 |

| Wall thickness including interior and exterior plaster | diameter of drill holes | Drill holes per m | Distance between drill holes (center to center) | Cartridge per m | Cartridge per drill hole | Consumption of capillary rods |
|--|-------------------------|-------------------|---|-----------------|--------------------------|-------------------------------|
| | mm | unit | cm | unit | unit | unit per m |
| up to 10 cm | 14 | 8 | 12.5 | 8 | 1* | 2 |
| up to 20 cm | 14 | 8 | 12.5 | 8 | 1* | 4 |
| up to 30 cm | 14 | 8 | 12.5 | 8 | 1* | 5 |
| up to 40 cm | 14 | 8 | 12.5 | 8 | 1* | 7 |
| up to 50 cm | 14 | 10 | 10.0 | 10 | 1 | 11 |
| up to 60 cm | 14 | 11 | 9.0 | 11 | 1 | 14 |
| up to 70 cm | 14 | 13 | 7.5 | 13 | 1 | 20 |
| up to 80 cm | 14 | 15 | 6.5 | 15 | 1 | 26 |

* If necessary, proportionally less than one cartridge can be applied.

Please note

Due to the chemical consistency of KÖSTER Mautrol Liquid Sealant, it is possible that after full cure of the material visible discolourations (efflorescence) may occur which may not be removable.

Consumption

Approx. 0.1 kg/m per cm wall thickness per m wall

The consumption may vary according to the absorbency of the masonry.

Cleaning

Clean tools immediately after use with water.

Packaging

| | |
|-----------|--|
| M 241 012 | 12 kg jerrycan |
| M 241 036 | 36 kg jerrycan |
| M 241 240 | 240 kg drum |
| M 241 550 | 0.55 kg cartridge (28 cartridges per carton) |

Storage

Store the material cool but frost free. In originally sealed packages the material can be stored for a minimum of 2 years.

Safety

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