



KÖSTER Mautrol Liquid Sealant

Technical Data Sheet M 241

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

The horizontal barrier is to be installed in such a way that it cannot be overflowed by groundwater, splash water, or another moisture ingress. The drilling holes (14 mm diameter) are usually placed horizontally in the lowest horizontal joint above ground level. In the basement, the horizontal barrier can be set above the basement floor, provided that the external waterproofing system completely covers the horizontal barrier from the outside.

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 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 of including interior and exterior plaster	Drill diameter	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

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Waterproofing Systems

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 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.

Cleaning

Clean tools immediately after use with water.

Packaging

M 241 012	12 kg jerrycan
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

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
KÖSTER NB 1 Grey	Prod. code W 221 025

Wall thickness including interior and exterior plaster	diameter of drill holes	Drill holes per m	Distance between drill holes (center to center)	Cartridges per m	Cartridges 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.

Before further work begins, such as the application of a KÖSTER Restoration Plaster, the area underneath the horizontal barrier must be secured against the moisture trapped under the newly installed horizontal barrier with KÖSTER NB 1 Grey applied in two layers.

Consumption

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

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

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