



## KÖSTER Crisin 76

Technical Data Sheet M 279

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- Official Test Report, MFPA Leipzig - according to WTA Technical Bulletin 4-10, Moisture Content 95 %

### Concentrated, solvent free synthetic resin against capillary rising moisture in walls, independent of moisture content and salt contamination



#### Features

KÖSTER Crisin 76 is a very thin, solvent free, concentrated liquid synthetic resin. It penetrates deeply into even the smallest capillaries and pores in building materials. Due to its very low density and a surface tension lower than that of water, KÖSTER Crisin 76 displaces the water in the capillaries. Capillaries lined with KÖSTER Crisin 76 are lined with resin and hydrophobic. The curing of the injected product is independent of the drying of the masonry. After full cure, KÖSTER Crisin 76 remains flexible, does not decay or decompose, acts neutrally, does not effloresce, and does not affect steel reinforcement. During application and after full cure, KÖSTER Crisin 76 is resistant to all of the usual corrosives in masonry such as acids, alkalis, and salts.

#### Advantages:

- Suitable even in cases of high moisture contents until 95 % ± 5 %.
  - Suitable even in cases of high salt contents.
  - Suitable for most types of salts (sulfates, nitrates, chlorides).
  - Solvent free.
  - The treated substrate does not have to be alkaline for the material to react.
  - No prior or subsequent drying of the wall necessary, even in case of high moisture contents.
  - Cannot be diluted with water / is not water soluble.
  - Resistant against most ordinary aggressive substances that are encountered in masonry such as acids, alkalis and salts.
  - Fast reaction, immediately effective.
  - Made from renewable raw materials.
  - Not bio-degradable.
  - Does not cause or promote corrosion of steel reinforcement.
  - Density (0,91 g/cm<sup>3</sup>); penetrates deeply even into the smallest capillaries of the construction material.
  - The cured material deposits an elastic resin on the pore walls and mechanically blocks the pores.
  - Can be applied to perforated brick and cracked or hollow masonry without having to fill the voids beforehand.
  - No subsequent injection necessary, one time installation, guaranteed success.
  - Patented system.
  - Easy installation, horizontal drilling.
  - Access required only to one side of the wall.
  - The material's action principle is proven to be effective for more than 30 years.
  - 10 years warranty\*.
- \* Under the condition that the material is applied by a certified applicator.

#### Technical Data

Density	0.91 g / cm <sup>3</sup>
Type of effect	pore restricting/ hydrophobizing
Viscosity	10 - 15 mPa·s
Active ingredients	70%

#### Fields of Application

For saturation and pressureless injection for creating subsequent horizontal waterproofing against capillary rising moisture in all mineral building materials. Can be applied from inside and/or outside. Can be applied in cases of high degrees of moisture penetration (tested up to 95% Moisture Content) and with all degrees of salt contamination.

#### Application

The application of KÖSTER Crisin 76 is carried out by:

- 1 - The KÖSTER Suction Angle System for a horizontally installed damp proof course
- 2 - Installation with the KÖSTER Cartridge System for diagonally installed damp proof course (wall thickness up to 24 cm)

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.

#### Installation with the KÖSTER Suction Angle System

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 length of the capillary rods must be at least 7 cm longer than the depth of the drill hole. Measure and cut the capillary rods accordingly. 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 angle is reusable. The KÖSTER Capillary rods are not pre-wetted.

Place the KÖSTER Crisin 76 cartridge in the suction angle's clamping device, so that the supply tank fills up with KÖSTER Crisin 76. The cartridges remain in the wall for 7 days. Remove cartridges after this period, empty cartridges can be removed immediately. After applying the injection, the capillary rods remain in the masonry. Protruding ends are pulled out and cut off so that the drill holes can be sealed with KÖSTER KB Fix 5. The suction angle system with KÖSTER Crisin 76 allows for quick and safe waterproofing against rising moisture.

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.

### Installation with the KÖSTER Cartridge System

1. Drill the required number of holes according to the table overleaf. The holes should be cleaned with compressed air, an industrial vacuum cleaner or, if necessary, be briefly flushed out with water. Holes should be drilled at an approximate 40° downward angle until approximately 5 cm before the end of the masonry. At least one horizontal joint should be traversed. The application can be carried out from the inside or the outside. If wall thickness is greater than 50 cm, it is recommend to drill holes from both sides to the middle.

2. After the drill holes have been cleaned, the KÖSTER Capillary Rods are inserted into the drill holes. Through this, prior filling of cavities, fissures and joints utilizing suspensions is usually not necessary. Put in the capillary rods so that approximately the first 4 cm of the drill hole are left clear. In this space, the cartridge will later be placed. Do not prewet the Capillary Rods. The capillary rods saturated with KÖSTER Crisin 76 remain in the drill holes once the application is completed. In case the prior filling of the masonry should be necessary, the cavities are to be filled with KÖSTER Micro Grout 1C prepared according to the respective technical guideline. Before full cure (after approximately 30 minutes up to a maximum of 3 hours) the holes are drilled out again.

3. Then put the KÖSTER Crisin 76 cartridges in the drill holes. Do not apply in temperatures below 0 °C, apply only as long as the masonry is not frozen.

4. The cartridges remain in the wall for 7 days. Remove cartidges after this period, empty cartridges can be removed immediately. After that, the drill holes can be sealed with KÖSTER Micro Grout 1C or KÖSTER KB Fix 5.

The system's most important feature is it's special adaptability to the specific requirements of the object at hand. By using the suction angle system:

- 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 is saved.

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

Guide value: 0.04 l / m per cm wall thickness  
Refer to last page for consumption table.

### Packaging

M 279 005	5 l jerrycan
M 279 010	10 l jerrycan
M 279 030	30 l jerrycan
M 279 200	200 ml cartridge

### Storage

In originally sealed packages the material can be stored for a minimum

of 6 months. Store frost free.

### Safety

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

### Other

Please be aware: After the installation of KÖSTER Crisin 76 salts can efflorescence on the surface due to the drying process. We suggest the use of KÖSTER Polysil TG 500 and the installation of a KÖSTER Restoration Plaster. When using the material in exterior applications the pigments can break down. This does not affect the function of KÖSTER Crisin 76.

Generally KÖSTER Crisin 76 can be installed by low-pressure injection. The injection pressure should not exceed 3 bar. The duration of the injection depends on the moisture content and type of structure.

### 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 Protimeter	Prod. code M 999 001

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Technical Data	Product Name: KÖSTER Crisin 76
Material Class	Synthetic hydrophobic resin
Alkalisiation of masonry required before injection	No
Alkalisiation of masonry required after injection	No
Drying of masonry required (before injection)	No
Reaction with salt	No
Injection system	Both pressurized and unpressurized
Water-soluble	No
Temperature range for application	> 0 °C
Consumption approx.	0.041 l /m per cm wall thickness
Color	Red
Solvent-Free	Yes
Can be plastered over	Yes (recommended to be primed with KÖSTER Polysil TG 500)
Penetration into surface	Yes
Mode of application	Injection ( KÖSTER Suction Angle system / KÖSTER Cartridge System)
Diameter of the capillaries	10 <sup>-7</sup> – 10 <sup>-4</sup> m
Degree of moisture penetration before application	95% ± 5%
Simplicity of application	+++
<b>Surface</b>	
Masonry	+++
Mortar	+++
Concrete	+++
Limestone	+++
Concrete or ceramic bricks	+++
Sandstone	+++
Marble	+++
Porous mineral substrates	+++
Gypsum	Must be removed
Moisture condition of surface	Dry or Wet
<b>Performance</b>	
Waterproofing	Horizontal waterproofing against capillary water transport
Time until rainproof	Immediately (hydrophobic)
Chemical resistance	Good

Lower+ Medium++ High+++

**Consumption for the KÖSTER Crisin 76:**

Thickness of the wall	CRISIN 76 Cartridges per meter	Distance drilling per meter in cm*	Suction Angles Cartridges per meter	Capillary Rods Size	Maximum Capillary Rods (45 cm) per meter	Capillary Rods Size	Maximum Capillary Rods (90 cm) per meter
6 to 30 cm	8	12,5	8	45	7,5	90	3,7
30 to 35 cm	8	12,5	8	45	7,5	90	3,7
35 to 40 cm	8	12,5	8	45	7,5	90	3,7
40 to 45 cm	9	11,1	9	45	9,4	90	4,7
45 to 50 cm	10	10,0	10	45	11,6	90	5,8
50 to 55 cm	11	9,1	11	45	13,9	90	7,0
55 to 60 cm	12	8,3	12	45	16,5	90	8,3
60 to 65 cm	13	7,7	13	45	19,4	90	9,7
65 to 70 cm	14	7,1	14	45	22,4	90	11,2
70 to 75 cm	15	6,7	15	45	25,7	90	12,8
75 to 80 cm	16	6,3	16	45	29,2	90	14,6

\* Borehole diameter: 14 mm, distance: from hole center to hole center

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