




## KÖSTER BDM Liquid

Technical Data Sheet C 731

Issued: 2024-02-08

Tested according to DIN EN 12390-8:2009-07 (depth of water penetration in concrete under pressure), Bremen Institute for Materials Testing (MPA), Test Report 50083-10.  
Test report, Supervision and Test for Building Engineering, BETC-CL-2 2020-02134, Compressive strength and resistance to pressurized water acc. to procedure GB 8076-2008 und GB/T 50080-2016, 8.4.2020.

### Triple action crystallizing integral waterproofing additive for concrete

 0764-CPR-0344		<b>KÖSTER BAUCHEMIE AG</b> Dieselstraße 1-10, 26607 Aurich 22 Nr. C 731 EN 934-2:2009+A1:2012 (Admixtures for concrete, mortar and grout - Part 2: Concrete admixtures)	
<b>Main Features</b>	<b>Performance</b>	<b>Evaluation and verification of system performance consistency</b>	<b>Harmonized technical specification</b>
Chloride content	max. 0.1 %	System 2+ EN 934-2:2009	
Alkali content	max. 2.2 %		
Corrosion behavior	contains only components according to EN 934-1:2008, A1		
Compressive strength	after 7d and 28d $\geq 85\%$ of the CM*		
Air pore content	at TM* $\leq 2\%$ compared to CM*		
Capillary water uptake	7d (TM* $\leq 50\%$ der CM*) 28d (TM* $\leq 60\%$ of the CM*)		
Dangerous substances	none, see safety data sheet		

\*: TM = Test Mixture; CM = Control Mixture

#### Features

KÖSTER BDM Liquid is a chloride-free material for the integral waterproofing of concrete. The material combines all three important properties for integral waterproofing. It compacts and blocks capillary pores, makes the concrete hydrophobic and also crystallizes within the concrete. By combining these three modes of action, KÖSTER BDM Liquid reduces the water absorption capacity of the concrete and increases the mechanical and chemical resistance. Free from corrosive substances, insensitive to mechanical damage to the surface.

#### Technical Data

Appearance milky  
 Density (20 °C) approx. 1.1 g/cm<sup>3</sup>  
 Viscosity approx. 100 – 200 mPa•s  
 Minimum working Temperature + 5 °C

#### Fields of Application

KÖSTER BDM Liquid directly replaces its volume of mixing water during the production of concrete as a liquid additive.

KÖSTER BDM Liquid is suitable for all concrete components with reduced water absorption requirements where low absorption is demanded such as pools, ponds, reservoirs, foundations, walls and floors, tunnels, precast concrete, etc.

#### Application

Mix well before use. KÖSTER BDM is added to the mixing water. The corresponding amount of water is subtracted from the mixing water. Prepared mixing water is stable for approx. 24 hours. The consumption depends on the quality and porosity of the concrete as well as on the required water resistance the concrete. Tests can be made before usage in order to determine the waterproofing effect with the given concrete formulation.

#### Consumption

1% - 4% of zement content by weight  
 Expected results based on reference concrete testing

Percent KÖSTER BDM	Test penetration depth	Percent reduction
0 (Reference concrete)	29 mm	0 %
1	19 mm	- 34%
2	15 mm	- 48%
3	14 mm	- 52%
4	10 mm	- 66%

#### Cleaning

Clean tools immediately after use with water.

#### Packaging

C 731 000	1000 kg
C 731 030	30 kg jerrycan

#### Storage

Store the material frost-free at temperatures between + 5 °C and + 25 °C. In originally sealed packages it can be stored for a minimum of 12 months.

#### Safety

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

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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