

BKM SEF-2K

PUR injection resin
technical data sheet

Article-No.: H-001-306 A-Comp. 5 kg metal canister
Article-No.: H-001-307 B-Comp. 5 kg metal canister
Article-No.: H-001-308 A-Comp. 10 kg metal canister
Article-No.: H-001-309 B-Comp. 10 kg metal canister

Product description

BKM SEF-2K is a two component (component A+B), hydrophobic, phthalate-free, low viscous and elastic DUO injection resin. It consists of a 2-phase-reaction property. In contact with water it reacts to a closed cell elastic foam within seconds. If there is no water BKM SEF-2K it reacts to a solid resin body. This new developed injection resin combines two injection resin systems in one product (foam and solid resin).

Product advantages

- Used as an one component system
- Two components (A + B)
- Hydrophobic
- Elastic
- In contact with water, foaming in seconds
- Closed cell foam
- Water stopper
- Very low viscosity
- Phthalate-free
- Reactive foam and solid resin in one product (DUO)
- Very good adhesion to the surface
- Excellent penetration properties
- Mixing ratio 1:1 by weight
- For injection works according DIN EN 1504 and DIN V 18028
- Usable for injection of injection hoses
- Alkaline stable
- Does not attack reinforcement steel
- Application with 1C equipment/machinery

Specification

Base : Polyurethane
Color : Component A : transparent
Component B : brown
Mixing ratio : 1 : 1 by weight parts
Processing temperature : from + 5°C up to + 35°C
Density : approx. 1.06 g/ml (DIN 53 479)
Viscosity (Brookfield): approx. 170 mPas (+25°C) (EN ISO 3219)
Elongation : approx 17 % (DIN EN 53 455)
Shore-A-Hardness : approx. 30 (ISO 868)
Glas transition temperature : approx. -23°C (EN 12 614)
Reaction time in contact with water : approx. 50 seconds
Curing time in contact with water : approx. 2 minutes (foam)
Pot life : approx. 40 minutes (1 liter at +23°C) (EN 1504-5)
Consumption : depend of cavity occurrence

All technical datas are measured in our laboratory.

Please take notice about the safety information and advice given on the safety data sheets and packaging labels.

GISCODE: PU40

Application areas

BKM SEF-2K is used for elastic sealing injection of hairline cracks, concrete joint, fractures and cavities in buildings and civil engineering. Typical application areas are for example tunneling, mining and civil engineering. In addition it is used for injection of injection hoses. It is used as a one component system. Also usable for injection of walls and cavity injection in masonry. Especially used in injection of floor-wall joints.

Product application

Surface preparation

Before starting injection procedure, an analysis of the to be waterproofed subject is required. On hand of analysis results (water situation, crack properties, crack width, cavity occurrence, water temperature etc.) choose the right injection material. For crack and concrete joint BKM One-Day-Packers must be installed in a 45° direction to the crack or concrete joint. The diameter of boreholes depends on the diameter of the used injection packers (For example: 13 mm packer diameter = 14 mm borehole diameter). The packers must be set tightened by using the right tools, so they do not release even at high injection pressures.

Application

BKM SEF-2K will be injected through 1K-injection devices (please send inquiry). The material (components A + B) should be mixed in the predetermined mixing ratio and is filled in injection device (material hopper) afterwards. The injection proceeds with an initial pressure of 15 bar for concrete and 3 bar in masonry. Depending on site situation, the injection pressure can rise. The ready mixed material should be injected within the specified processing time / pot life.

BKM SEF-2K has to be injected as long as the crack or concrete joint is filled with resin. Change to the next installed packer after the injection material came out of the next packer, of the crack surface or out of the joint. Changes in temperatures can change the reaction characteristics of the material. We recommend a subsequent injection within the processing time / pot life through the same injection packer.

After complete curing (reaction) of BKM SEF-2K the boreholes are sealed with BKM HS Mortar. Depend on cavity occurrence the mentioned material consumption can change. Changes in temperatures changing the reaction properties of material.

Tools and equipment should be cleaned immediately after use with BKM Resin cleaner. Cured material can only be removed mechanically.

Comments

Delivery form

10 kg BKM SEF-2K

Article-No.: H-001-306 A-Comp. 5 kg metal canister

Article-No.: H-001-307 B-Comp. 5 kg metal canister

20 kg BKM SEF-2K

Article-No.: H-001-308 A-Comp. 10 kg metal canister

Article-No.: H-001-309 B-Comp. 10 kg metal canister

Storage

12 months

(frost-free and dry, +5°C up to +25°C in original packaging)

From 24 August 2023, appropriate training must be provided prior to industrial or commercial use.

Legal notice


The above information, in particular the suggestions for processing and use of our products, are based on our knowledge and experience under normal circumstances, provided that the products have been stored and applied correctly. Due to the different materials, substrates and divergent working conditions, a guarantee of a working result or a liability, regardless of the legal relationship, cannot be justified on the basis of these instructions or verbal advice, unless we are accused of intent or gross negligence in this respect. In this respect, the user must prove that all knowledge necessary for a proper and promising assessment by BKM was provided to BKM in writing, in time and in full. The user must check the suitability of the products for the intended application. We reserve the right to make changes to product specifications.

Proprietary rights of third parties must be respected.

The latest product data sheet applies and must be requested from us. The responsibility for the successful application of our products lies with the user, as the use is beyond our control. However, we ensure the quality of our products in accordance with our conditions of sale and delivery, without guaranteeing the success of their application. Our data sheets represent advice based on our best knowledge, but no obligation can be derived from them. Our written consent is required to guarantee properties and application possibilities that go beyond the information recorded in the data sheets.

Further information can be found at:

www.bkm-mannesmann.de

	<p style="text-align: center;">BKM.Mannesmann AG Wideystrasse 23 D-59174 Kamen</p> <p style="text-align: center;">17 EN 1504-5:2004</p> <p style="text-align: center;">Unique identification code of the product-type BKM.Mannesmann AG-0160 EN 1504-5:ZA.1b</p> <p style="text-align: center;">Concrete injection for elastic filling of cracks U(D1) W (1)(1/2/3)(5/30)</p>
<p>Adhesion</p> <p>Elongation</p> <p>Water tightness</p> <p>Glass transition temperature</p> <p>Injectability into dry medium</p> <p>Injectability into non dry medium</p> <p>Durability (Compatibility with concrete)</p> <p>Corrosion behavior</p> <p>Release of dangerous substances</p>	<p>≥0,2 N/mm²</p> <p>< 10%</p> <p>D1</p> <p>-23°C</p> <p>0.1</p> <p>0.1</p> <p>No failure by compressive testing, Lost deformation work <20%</p> <p>It is assumed that no corrosive effects are present</p> <p>NPD</p>