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PI-0508-GPD-ETA-08

BIGUMA® - KV 3

Joint sealant for the sealing of chemically charged joints in plants for containment, handling and filling of substances hazardous to water.

Product description

BIGUMA® - KV 3 is a two-component polysulphide sealant for sealing of chemically charged joints especially in plants for containment, handling and filling of substances hazardous to water. BIGUMA® - KV 3 has got the European technical approval by Deutschen Institut für Bautechnik (DIBt) for the joint sealing systems in plants for containment, handling and filling. The type BIGUMA® - KV 3 PG is a castable modification, self levelling and suitable for horizontal floor joints with a slope of < 3 %. The type BIGUMA® - KV 3 GG is non-sagging for vertical joints in pedestals and walls or in joints with a slope of > 3 %. After curing the joint sealant has an elastic movement accommodation of up to 35 % of the joint width.

Uses

Preferably used for the sealing of joints in flooring or adjacent areas between building structures, which are, apart from mechanical loads by traffic or temperature change of building parts, exposed to chemicals and mineral oil products. In combination with waterproofed building structures and under consideration of corresponding and constructive joint design BIGUMA® - KV 3 prevents reliably from the penetration of substances hazardous to water into the soil. The main field of application are plants for the containment, handling and filling of substances hazardous to water. BIGUMA® - KV 3 is not suitable for joints that are permanently under the surface of liquids, i. e. purification plants and swimming pools or that are exposed to strong and/or oxidising acids (i. e. nitric acid) and leaching (i. e. sodium hypochlorite solution).

Application instructions for BIGUMA® - KV 3

Before the application it has to be guaranteed that the approved joint geometries will be observed and that the suitability of the joint flanks and of the adjoining building parts is given

The joints to be sealed have to be free from loose particles, mortar residues, dust, grease, dirt and similar.

The application temperature (measured at the building part!) is not allowed to be under +5°C and over +40°C and has to be at least 3 K above the dew-point temperature.

At the particular joint flank the primer has to be applied smooth, whereas the allocation of the different primers to the different contact materials have to be observed strictly. At porous surfaces the bonding area have to be pre-treated with the primer COLZUMIX® - Primer CP-P. The primer has to be applied on dry substrate (max. 4 % residual moisture) and it has to vent depending on the ambient temperature for 30 minutes to 2 hours, without drying completely. Non-porous substrates have to be primed with COLZUMIX® - Primer CP-G. The vent time is 10 to 30 minutes. At freshly cut or grinded joints in asphalt surfaces the primer COLZUMIX® - Primer CP-A has to be used.

In order to achieve the right sealing depth and to avoid a three-flank-bonding the joint has to be backfilled with an appropriate non-porous material (i. e. PE-round profile, closed cell). If this is impossible the joint ground has to be covered with a separating material (PE-foil, silicone paper).

Components A and B of the joint sealing BIGUMA® - KV 3 have to be mixed for at least 5 minutes. For the type BIGUMA® - KV 3 PG the separately packed component B will be stirred up, added to the component A and mixed using an adequate tool until the mixture is completely homogenous and without white stripes. Make sure that no air is stirred in. The component A and B of the type BIGUMA® - KV 3 GG are already packed in one container and will be mixed in the same way as mentioned above.

The mixed sealant is now applied into the joint with adequate tool (i. e. by hand or gun), whereas you have to pay attention that the indicated period of time between application of the primer and the application of the sealant won't be exceeded or under-run.

At chamfered building parts the chamfer is not allowed to be filled. Before the application of the type BIGUMA® - KV 3 GG the edges of the joints should be taped off first. During the working period the applied sealant has to be smoothen and the tapes has to be removed before curing.



At the castable type it is recommended to remove air-bubbles by gently brushing over the surface with a soft flat brush or a piece of smoothing wood approx. 30 minutes after the application of the sealant. For the time of the fully curing the joint sealant has to be protected against weather effects.

You will find detailed information and application instructions in the European technical approval (only in German language available!) of DIBt. We would be pleased to place them at your disposal

Storage

Dry, at temperatures below +25 °C in unopened original packaging storable for 12 months. BIGUMA® - KV 3 is frost resistant, but has to be brought to minimum +10 °C before the application.

Technical data

	BIGUMA® - KV 3 GG	BIGUMA® - KV 3 PG
Polymer base	polysulphide	polysulphide
Application time	at least 2 hours	at least 2 hours
Curing	approx. 24 hours depending on the temperature and relative humidity	approx. 24 hours, depending on the temperature and relative humidity
Max. allowed deformation	35% of the joint width	35% of the joint width
Shrinkage	none	none
Mixing ratio	100 : 10 by mass	100 : 10 by mass
Shore-A-hardness	approx. 15	approx. 10
Modulus at 100% Extension (normal climate)	approx. 0,3 N/mm ²	approx. 0,2 N/mm ²
Colour	component A white component B black A and B mixed grey	component A white component B black A and B mixed grey
Form of supply	component A and B packed in one tin thin metal tin of 2,5 l thin metal tins of 4 pieces in a carton	component A and B packed separately thin metal tin of 4,0 l thin metal bucket of 10,0 l thin metal tins of 4 pieces in a carton thin metal tin (combined container) without covering

The changing application conditions, the different working conditions as well as the multiplicity of the materials exclude a demand of liability based on these indications. The best security to avoid mistakes will be reached by own tests regarding the intended application purpose.

This product information is in accordance with our current information stand, the stated data are average values under normal conditions. The applicator is obliged to check the suitability and the possible applications for the intended purposes. For special technical information please do not hesitate to contact us. Our products are sold subject to our General Terms and Conditions of Sale.

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