

## dortmunder gußasphalt gmbh & co. kg





# BIGUMA<sup>®</sup>-RS

Polymer modified bituminous joint sealant in accordance with TL Fug-StB 01

## Uses:

BIGUMA<sup>®</sup>-RS is especially used for the repair of cracks and seams in asphalt and concrete roads, also by using the oversealbanding method.

## **Properties:**

BIGUMA<sup>®</sup>-RS fulfils the requirements of "the Technical Delivery Conditions for bituminous joint sealants" (TL Fug-StB 01) for "crack sealants".

BIGUMA<sup>®</sup>-RS or the produced joints distinguish itself by the following characteristics:

- good bonding at bituminous and mineral subsoil
- stable at solar radiation
- doesn't stick to tyres at rolling
- good application characteristics at heat and at cold
- high ageing resistance of the joint
- · resistant against aqueous solutions, salts and thinned acids, or similar
- bituminous building material and therefore problem-free recyclable

## **Application instructions:**

## a) Melting:

BIGUMA<sup>®</sup>- RS has to be heated carefully to the application temperature of 170 - 180 °C in a boiler equipped with mechanical agitation, indirect heating and thermometer. The temperature of the crack sealant must be thermostatically regulated; it must be controllable at all times. Overheating of the sealant should necessarily be avoided, as this will damage the polymers, which were added for the improvement of the product, and consequently it will lead to a loss of the guaranteed properties.

## b) Requirements to the subsoil:

The existing cracks have either to be blown under high pressure with hot air lance (crack – covering - procedure) or milled before (milling - sealing - procedure). For the repair it is important that all possibly existing foreign bodies and loose parts will be removed from the crack area. Through the hot air lance the asphalt of the crack flanks will be warmed and consequently the bitumen activated. The application of a primer is not necessary when using this method.

If necessary, the primer COLZUMIX<sup>®</sup>-Haftgrund, which is especially adapted to this material, has to be used for BIGUMA®-RS.

## c) Filling of the cracks:

The filling of the cracks takes place in accordance with the "Hints for the repair of crack as well of damaged seams and connections in traffic areas made out of asphalt " (HSR).

As well at the oversealbanding as at the milling-sealing-procedure the sealant will be applied to the crack area with the help of a slider. Corresponding to the crack configuration different width will be used. The at the indicated application temperature thin fluid crack sealant penetrations into the crack and connects with the crack flanks. A part of the crack sealant stays at the surface and covers the crack area overlapping and consequently prevents a separating of the crack sealant from the crack flanks.

The application thickness at the crack sealing is between 2 and 3 mm. For grip improvement and for visual alignment of the existing layer, fine pre-bituminised chippings of the grading 1/3 mm will be spread directly after the pouring on the still hot sealant and pressed on.





Chart: Hints for the choice	e of different procedu	ires for the sealing of crac	cks or damaged seams
Damage		Procedure	
Crack/ damaged seam	width	crack – covering - procedure (oversealbanding)	milling - sealing - procedure
slight opened	< 2 mm	+	+
slight until clear opened	2 mm up to 25 mm	-	+
with asset erosion and adjoining cracks	> 25 mm	-	-

#### Weather conditions:

The prepared joints are only allowed to be sealed at dry weather conditions and at a surface temperature of the building part of 0°C.

#### Material consumption:

BIGUMA <sup>®</sup> - RS:	crack length (cm) x width of the slider (cm) x height of the scraper (cm) x density of the crack sealant ( $g/cm^3$ )
	+ addition for the filling of the cracks depending on the depth and the
	width of the cracks = consumption in gram.
Primer:	The consumption of the primer (COLZUMIX <sup>®</sup> -Haftgrund) is approx. 3 %
	of the sealant amount needed.

#### Storage:

The product has to be stored cold and dry and is storable for at least 24 months.

#### Form of supply:

The crack sealant will be filled into thin metal tins (hobbocks) and transported on non-returnable pallets. A separation agent coating and the welted type of the hobbocks guarantee a fast, problem-free and safe removal of the mass out of the tin. The removed blocks can be filled into the heater together with the probably still adherent separation agent coating. Alternatively the crack sealant is available in silicone-coated cartons.

Cleaning agent:	
Carton:	30 kg, 12 kg
Thin metal tin:	35 kg, 12 kg

#### Cleaning agent:

Equipment:	petrol and commercial solvents
At skin contact:	hand washing paste

### Authoritative regulations:

At the repair of cracks you have to follow among others the following regulations:

- ZTV Fug-StB 01
- ZTV BEA-StB
- Hints for the repair of crack as well of damaged seams and connections in traffic areas made out of asphalt (HSR)

## Technical data:

Application temperature:	approx. 170 - 180 °C
Density:	approx. 1,25 g/cm <sup>3</sup>
Primer:	COLZUMIX <sup>®</sup> -Haftgrund

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.