

# BIGUMA®-1401



Polymer modified bitumen based elastic joint sealant in accordance with TL Fug-StB and DIN EN 14188-1, Type N1



## Uses

BIGUMA®- 1401 is suitable for little or not trafficked joints in concrete and asphalt areas, which are subject to high movements. Particularly at joints on concrete and steel bridges along kerbs.

## Properties

BIGUMA®- 1401 fulfils the requirements of the Technical Delivery Conditions for joint sealants in traffic areas" (TL Fug-StB) and DIN EN 14188-1, Type N1.

BIGUMA®- 1401 or the joints produced with the joint sealant distinguish itself by the following characteristics:

- elastic set, therefore high movement accommodation factor
- designed for a possible change in joint width up to 35 %
- good application characteristics at heat and at cold
- good bonding at bituminous and mineral subsoil
- high ageing resistance
- resistant against aqueous solutions, salts and thinned acids, or similar
- bituminous building material and therefore problem-free recyclable

## Application instructions

### a) Melting

BIGUMA®- 1401 has to be heated carefully to the application temperature of 160 - 180 °C in a boiler equipped with mechanical agitation, indirect heating and thermometer. The temperature of the 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 concrete and asphalt joints to be sealed should be thoroughly blown with high-pressure-air or cleaned with a brushing machine, whereas you have to pay attention to special separation of cleaning and application works. For artificial dry-out or pre-heating of the joints, hot compressed air lances can be used. For BIGUMA®- 1401 the primer COLZUMIX®- Haftgrund has to be used, which is adapted to this material. The function of the primer is to bind the dust bonding at the concrete or asphalt and to form an adhesive layer, which will fuse with the sealant being filled into the joints.

The primer must cover the joint flanks completely by forming a film. It is recommendable to prime at both sides a stripe of approx. 1 cm width of the pavement. Before filling the joints the applied primer must have dried, i. e. the surface must be touch-dry. The primed joint has to dry and be free from dust to guarantee an intensive bond to the concrete or the asphalt.

## Central Sales

Dortmunder Gußasphalt GmbH & Co. KG

✉ Am Hafenbahnhof 10  
44147 Dortmund  
Germany

☎ +49 231 395797 - 37  
@ info@dga.de

## Producer

Plant Dortmund

### c) Filling of the joints

BIGUMA®- 1401 can be applied by can or mechanical by the help of an application lance. The joint sealant must have reached the indicated application temperature during pouring work. If the pouring temperature is clearly below the stated temperature, the flow ability of the sealant suffers. The joint sealants may possibly not fill the to be poured joints completely. There is the danger that voids may occur which later can result in sinking of the sealant under rolling traffic.

Before the application of BIGUMA®- 1401 a suitable bedding material is to apply. Through the bedding material the height of the joint sealant in the joint will be modulated. At the same time a leaking of the compound into possibly existing voids and the three-flank bonding will be prevented. A three-flank bonding may lead to a failure of the joint sealant caused by the tension. The cooling of the sealant may cause shrinkage dependent on the joint dimensions; a second pouring can be necessary. This second pouring should be made immediately after the first one. The material has to be poured under flushing.

### 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®- 1401: joint length (cm) x joint width (cm) x joint depth (cm) x specific gravity of the sealant (g/cm<sup>3</sup>) = consumption (g).

Primer: The consumption of the primer (COLZUMIX®- 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 joint 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.

Metal tins: 8 kg, 27 kg

Cartons: 10 kg, 22 kg

### Cleaning agent

Equipment: BIGUMA®- SWS

At skin contact: hand washing paste

### Authoritative regulations

At the production or the filling of the joints you have to follow among others the following regulations:

- ZTV Fug-StB
- ZTV Beton-StB
- ZTV - ING

### Central Sales

Dortmunder Gußasphalt GmbH & Co. KG

✉ Am Hafenbahnhof 10 ☎ +49 231 395797 - 37

44147 Dortmund @ info@dga.de

Germany

**Producer**

Plant Dortmund

## Technical data

Application temperature:	approx. 160 - 180 °C
Density:	approx. 1,0 g/cm <sup>3</sup>
Primer:	COLZUMIX®-Haftgrund

This product information corresponds to our latest available information. The processor is obliged to test the suitability and application options for the intended purpose. We shall be pleased to advise if you have any questions about our product. Our Terms and Conditions of Business apply, which can be found at [www.dga.de](http://www.dga.de).

Rev.: 01/19

### Central Sales

Dortmunder Gußasphalt GmbH & Co. KG

✉ Am Hafenbahnhof 10  
44147 Dortmund  
Germany

☎ +49 231 395797 - 37  
@ info@dga.de

### Producer

Plant Dortmund