

Bulk Sealant PB 556

Construction Chemicals > Joint Fillers > Polyurethane-Based



It is a dual-component, cold-applied, chemically curing material that provides a smooth surface. It is polyurethane-based, contains coal tar, and is elastomeric with high abrasion resistance and adhesion strength. This material is especially resistant to jet fuels, hydraulic fluids, and oils. It is suitable for heavy traffic conditions and withstands dynamic movements. Additionally, it is completely resistant to UV rays.

■ Fields of Application

- Runways, parking areas, terminals, and ramps at airports
- Highways and bridge connections exposed to all kinds of traffic
- Stadiums and industrial floors
- Fuel stations and petrochemical areas

■ Advantages

- Cold-applied
- Chemically cures and self-levels to provide a smooth surface
- Has very high abrasion resistance and adhesion strength
- Resistant to dynamic movements
- Resistant to jet fuels, oils, diluted acids and bases, and various chemical substances
- Completely resistant to UV rays
- Curing time can be accelerated or slowed down according to user needs

📖 Surface Preparation

The joint surfaces must be clean and dry. Oil, grease, bitumen, or old joint materials should be completely removed. Loose materials at the edges of the joints should be removed, and broken joint edges should be repaired with Merks Repoc Eb 456 Epoxy repair mortar. Like all other polyurethane-based materials, Merks Casting Mastic PB 556 is affected by water before curing. Therefore, the joints must be dry, and the sealant should not come into contact with water until chemical curing is complete. The edges of the joints should be primed with Merks Pu Primer PB 724.

📖 Joint Characteristics*

The joint width should not be lower than 8mm. In joints narrower than 15 mm, the filling depth and joint width should be equal. For joints between 15 Dec-25 mm, the joint depth should be equal to 80% of the joint width (min. 14mm). For wider joints, the joint depth should be set to 20 mm. In order to ensure the depth of the filling to be determined according to the joint width, preferably a wick that does not adhere to the filling material should be placed in the joint. Suppositories made of closed-cell polyethylene foam are suitable for this purpose. The diameter of the wicks should be 10-25% more than the joint width, the wick should be placed by compressing. The dimensions calculated for some joint widths are included in the table.

📖 Product Preparation

Merks Casting Mastic PB 556 is prepared by first opening the container of component A and mixing it within its container for 1-2 minutes. Then, the entire contents of component B are poured onto component A, and the mixture is stirred for 3 minutes using a low-speed drill (100-500 rpm). For manual mixing, it is necessary to mix for a longer period to ensure a homogeneous mixture. During mixing, the mixer should be moved around the entire container, and care should be taken to avoid incorporating air into the mixture.

📖 Packaging

12,50 kg set (11.36 kg +1,14 kg)

📖 Application

Preparation of the filling sealant in an amount that can be used so that the amount does not remain in the container, as well as the place of application and the capacity of the application apparatus should be taken into account. The paste that has completed its service life is not used and absolutely no solvent should be used to thin it. The prepared mixture is filled into a refillable type reciprocating application apparatus (putty gun-applicator). An outlet tip with a diameter that can enter the joint should be attached to the apparatus and this tip should be moved forward by sliding over the base material inside the joint while the sealant is applied. Thus, it is ensured that there is no gap left under the paste and a sufficient amount of paste is applied. After application, the surface of the paste should be arranged with a spatula. The application can also be done directly with the help of a spatula. It is recommended to glue tape to both sides of the joint before starting to apply, especially in joints where decorative appearance is important. Filling of cracks, especially the repair of cracks formed on concrete floors in airports and highways, and ensuring tightness are of great importance. Merks Bulk Sealant Pb 556 can also be used for such purposes. In general, it is useful to open a groove at the mouth of the cracks, at least 10 mm deep and 6 mm wide.

📖 Points to Consider

- It is not recommended for joints narrower than 8 mm.
- It is not used on dirty, oily, bituminous and wet joints. It is important to clean such joints before application to ensure a good adhesion.
- Despite the high carrying resistance, studded tires, ice chains, pointed heels can cause damage.
- The ambient temperature should not be higher than 35°C and lower than 5°C during application. If it is mandatory to apply under conditions other than these conditions, please contact us.
- It is recommended to use professional quality equipment.
- Tools and equipment contaminated with application tools and filler should be cleaned before the filler hardens. For this purpose, tools should first be wiped with a cloth and then cleaned with solvents such as xylene.



TECHNICAL DATAS

Product	Two Component Polyurethane
Solid Content Ratio	%100
Color	Brown - Black
Density (A+B)	1,50±0,1 g/cm ³
Work Flexibility in Expansion	% 25
Work Flexibility in Shrinkage	% 25
Elongation at Break	> %600
Hardness (Shore): ASTM D 2240	A20±5
Resilience	> %97
Penetration	0,5 mm
Application Life of Mixture at 20°C	2 hours
Tack Free @20 °C	24 hours
Light Pedestrian Traffic Suitability Time at 20°C	2 days
Heavy Traffic Suitability Time at 20°C	0,5 mm
Chemical Resistance Cure Time at 20°C	4 days

Joint Characteristics*

Joint Width mm	8	10	12	14	16	18	20	24	28	32	36	40
Joint Filling Thickness mm	8	10	12	14	14	14	16	19	20	20	20	20
Joint Top Clearance mm	4	5	6	7	7	7	8	10	10	10	10	10
Wick Diameter mm	10	13	15	18	20	23	25	30	35	40	45	50
Minimum Wick Depth mm	12	15	18	21	21	22	24	29	30	30	30	30
The size of the 12.5 kg set is mt	130	83	58	43	37	32	26	18	15	13	12	11