EN

Polysulfide PB 540 D

Construction Chemicals > Joint Fillers > Polysulfide-Based

This polysulfide-based, two-component material is cold-applied and chemically curing, offering high adhesion strength. It is resistant to wastewater, solvents, fuels, hydraulic fluids, and oils, making it suitable for heavy traffic conditions and dynamic movements. The material adapts to permanent movements caused by building and infrastructure shifts. Designed specifically for vertical joints, it is formulated to provide a self-leveling smooth surface during application.

Fields of Application

- Chemical Resistance and Submersion: Suitable for applications requiring chemical resistance and those exposed to water immersion.
- High-Traffic Areas: Ideal for highways and bridge connections subjected to all types of traffic.
- Stadiums and Industrial Floors: Suitable for use in stadiums and industrial flooring.
- Fuel Stations and Petrochemical Areas: Effective for use in fuel stations and petrochemical facilities.

Advantages

- Cold-Applied
- Chemically Cures and Provides a Self-Leveling Smooth Surface
- Very High Adhesion Strength
- Resistant to Static and Dynamic Movements
- Resistant to Sweet, Salt, and Wastewaters, Solvents, Fuels, Oils, Acids and Bases, and Various Chemical Substances

1 Surface Preparation

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. Before applying Merks Polysulfide PB 540 Y, 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 before application.

2 Joint Characteristics*

The joint width should not be less than 8 mm. For joints narrower than 15 mm, the depth of the filler should be equal to the joint width. For joints between 15-25 mm, the depth of the joint should be 80% of the joint width (minimum 14 mm). For wider joints, the joint depth should be set to 20 mm. To achieve the desired filler depth based on joint width, a backer rod that does not adhere to the filler material should be placed inside the joint. Closed-cell polyethylene foam backer rods are suitable for this purpose. The diameter of the backer rod should be 10-25% larger than the joint width, and it should be installed by compressing. Calculated dimensions for some joint widths are included in the table.

3 Product Preparation

Open the container of component A and mix it within its container for 1-2 minutes. Then, pour the entire contents of component B onto component A and mix for 3 minutes using a low-speed drill (100-500 rpm). For manual mixing, it is necessary to mix for a longer period to achieve 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.

4 Packaging

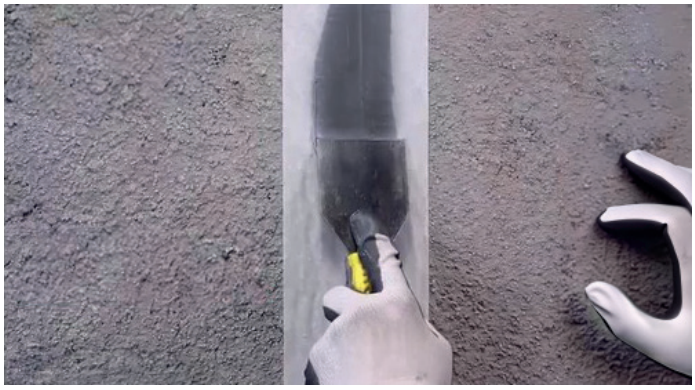
10 kg set (9,11 kg +0,89 kg)

5 Application

The amount of polysulfit should be prepared in quantities that will be used up within the container, considering the application area and the capacity of the application tools. Expired mastic should not be used, and no solvents should be added for thinning. The prepared mixture should be loaded into a piston-type application tool (caulking gun or applicator). The tool should be fitted with a nozzle of a size that can fit into the joint, and as the filling mastic is applied, the nozzle should be moved across the bottom material of the joint to ensure that no voids are left and that a sufficient amount of mastic is applied. After application, the surface of the mastic should be smoothed with a spatula. Application can also be done directly with a spatula. For joints where decorative appearance is important, it is recommended to apply tape to both sides of the joint before starting.

6 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.
- Application tools and other tools contaminated with sealant should be cleaned before the paste hardens. For this purpose, tools that are wiped with a cloth should be cleaned with solvents such as xylene first.



TECHNICAL DATAS

Product	Two Component Polysulfide
Solid Content Ratio	%100
Color	Grey - Black
Density (A+B)	1,70±0,1 g/cm^3
Work Flexibility in Expansion	% 50
Work Flexibility in Shrinkage	% 50
Elongation at Break	≥ 500
Hardness (Shore): ASTM D 2240	A15 ± 5
Resilience	> %85
Penetration	0,6 mm
Application Life of Mixture at 20°C	1 hour
Tack Free @20 °C	8 hours
Light Pedestrian Traffic Suitability Time at 20°C	24 hours
Heavy Traffic Suitability Time at 20°C	2 days
Chemical Resistance Cure Time at 20°C	2 days

Joint Characteristics*

Derz Genişliği mm	8	10	12	14	16	18	20	24	28	32	36	40
Derz Dolgu Kalınlığı mm	8	10	12	14	14	14	16	19	20	20	20	20
Derz Üstü Boşluk mm	4	5	6	7	7	7	8	10	10	10	10	10
Fitili Çapı mm	10	13	15	18	20	23	25	30	35	40	45	50
Minimum Fitil Derinliği mm	12	15	18	21	21	22	24	29	30	30	30	30
10 kg Setin yaptığı metraj mt	92	59	41	30	26	23	18	13	11	9	8	7