REMEI BPB GmbH & Co. KG
BETRA GmbH

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Reference: Additional-Line

BPB® Joint Sealer

Binding agent based on a liquid polymer
Consumers
Product No.: 300037000 ! ATTENTION: NEW PRODUCT NUMBER FROM 2024 !
Product No. until 2023: 419000008

Product Information:

Properties:
– oxidative hardening with atmospheric oxygen leads to the bonding of sand
– high air and water permeability
– no sealing of the surface
– green growth is mechanically prevented

Application:
for stabilisation of single- and multi-grained dry sands
as paver jointing

The joint strengthener can be used as a 1-component binder to consolidate sand of different grain sizes. If necessary, the mass can be colored by adding weather-resistant color pigments. The sand structure and the natural void content of the sand is almost completely preserved even with the densest storage. This ensures good water permeability of the hardened joint strengthener - sand mixtures.

Building physics data:
The following data were determined on a cured joint strengthener-sand mixture
(100 parts by mass of sand with a moisture content of less than 2%, 2 parts by mass of joint strengthener):

Prism density:	approx. 1,650 g/cm³
Prisms	4 x 4 x 16 cm³
Compressive strength:	approx. 14.2 N / mm² after 3 days at 50 ° C
Flexural strength:	approx. 4.9 N / mm² after 3 days at 50 ° C
Modulus of elasticity in compression test:	approx. 2.9 - 10³ N / mm²
Tensile strength DIN 53 455:	approx. 2.0 N / mm²
Shear strength:	approx. 1.3 N / mm², without load
Annealing test:	after 1 h 300 ° C approx. 0.8% by mass
Thermal conductivity:	approx. 0.6 W / (m K)

The joint strengthener - sand mixtures are usually produced in mixing units (e.g. compulsory mixers) and must be processed further immediately.

The curing of the mixtures takes place through the absorption of atmospheric oxygen and is temperature-dependent.

Processing time:
• at 5 °C: approx. 60 min.
• at 30 °C: approx. 30 min.

Due to the oxidative hardening, the development of the compressive and flexural strengths of the molded parts are heavily dependent on temperature, time and the size and geometry of the molded body.

For example:

Cube (20 x 20 x 20 cm³)
Flexural strength approx. 4.6 N / mm² after 3 days at 25 ° C
Compressive strength approx. 7.2 N / mm² after 34 days at 25 ° C

Bars (70 x 15 x 10 cm³)
Flexural tensile strength approx. 3.4 N/mm² after 3 days at 25 ° C
Change in length approx. 0.6% after 5 days of immersion in water

Plates (30 x 30 x 5 cm³)
Water permeability approx. 1.6 x 10-3 m / s with a thickness of 4 cm

Adhesion strength:
Pretreatment with joint strengthener is recommended to improve adhesion on concrete and other substrates

Dosage:
500 ml/25 kg sand
To assess the final effect, the product must be tested on a small surface area which is representative for the final application.
Depending on the grain distribution, amounts of 1.5 - approx. 4% by mass of joint strengthener are required.

Please make sure than only sands with a water content of <1.0 mass % are used. The prepared mortar may not get in touch with water. When using the joint sealer, the color of the sand is not changed.

Specifications:

Appearance:	liquid
Colour:	deep violet to brown
Density:	0.91 ± 0.02 g/ml

Storage:
Under normal storage conditions (closed container, 20 °C) minimum shelf-life 6 months
Protect from frost, direct sunlight and contamination.
The storage temperature must not exceed 30 °C.

Packaging:
Bottle 0.5 liter
Other delivery quantities on request

Safety Rules:
See EC safety data sheet.
The product should only be used with suitable protective gloves (EN 374) and safety goggles (EN 166).

When used, ensure good ventilation (5 to 15 air exchange per hour).

When working indoors, ensure good ventilation. Avoid skin contact! Wear protective gloves when processing.

Assistance:
Please contact our Technical Application Centre.

Industrial use:
Recommended frequency and duration of use:
< 480 minutes/day
Avoid skin contact! Wear protective gloves when processing.

Commercial use:
Recommended frequency and duration of use:
< 240 minutes/day
Avoid skin contact! Wear protective gloves when processing.

Consumers:
Recommended frequency and duration of use:
120 minutes/day
Avoid skin contact! Wear protective gloves when processing.

Environmental Exposure:
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or the sewage system.