Tile laying technology



UNIVERSAL SEAL PU 500









- > thixotrop
- > elastic
- > chemically resistant
- > rollable and spreadable

Product description

Elastic, solvent-free, water-impermeable, thixotropic, permanently elastic, seamless and jointless two-component compound seal based on polyurethane.

For indoor and outdoor sealing on both horizontal and vertical surfaces. Can be applied under various ceramic coverings, in accordance with EN 14891, ÖNORM B 3407 W1-W6, according to DIN 18534 for water impact class W0-I to W3-I, according to DIN 18531-5 (balconies, loggias, etc.) and DIN 18535 (swimming pools and containers), as well as according to the test principles for the issue of a general building inspection test certificate.

Can be used in swimming pools, large kitchens, industrial wet rooms, showers, bathrooms, etc.

Delivery format

Container	Outer packaging	Pallet
20 KG / BHO	-	16 BHO
10 KG / BLE	-	42 BLE
3.2 KG / BKA	-	99 BKA
1.6 KG / BKA	-	100 BKA

Storage

Can be stored frost-free, cool, and dry on wooden shelves in the unopened original container for 180 days

Processing

Recommended tools

Slow-rotating electric agitator, suitable mixing vessel, smoothing trowel, roller, compressed air funnel gun.

Mixing

Component A and component B are basically delivered in the relevant correct mixing ratios. A scale must be used to determine partial quantities. Thoroughly mix component A via a slow-rotating electric agitator (approx. 300 rpm), then add component B and continue mixing until a homogeneous, lump-free consistency is reached (approx. 2-3 minutes).

40048, UNIVERSAL SEAL PU 500, valid from: 11.12.2023, Magdalena Riegler, Page 1

TECHNICAL DATA SHEET

Tile laying technology



To prevent mixing and/or proportioning mistakes, the mixed material must be decanted into a clean, dry container (repotted) and stirred thoroughly again.

Processing

The suitable substrate must be primed with an epoxy resin primer (e.g. epoxy moisture barrier 2K EP 170 or epoxy base resin EP 70 BM) and must be completely sanded with furnace-dried quartz sand (0.3 - 0.8 mm). A funnel gun (compressed air) must be used for this on wall surfaces. After the primer has dried, the first sealing layer must be applied over the entire surface using the appropriate tool for the type of application. Always seal in two layers.

Connecting areas are to be processed carefully with corresponding system components (sealing tapes, sealing collars, inner and outer corners, etc.) and precisely connected to the components to be sealed.

Usable after approx. 24 hours.

In order to ensure mechanical grip for subsequent coverings, the still fresh second sealing layer must be completely sanded with furnace-dried quartz sand (0.6 - 1.2 mm). A funnel gun (compressed air) must be used for this on wall surfaces.

Technical data

Consumption approx. 1.9 kg/m² per mm of layer thickness

Mixing ratio A: B = 6,25:1

Pot life approx. 30 min. (depending on the quantity mixed)

Recoatability approx. 12 - 18 hrs depending on temperature (approx. 12

hrs. at 23°C)

Crack bridging approx. 1.60 mm (at +20°C); approx. 1.35 mm (at -20°C)

Waterproofing 2.5 bar (25 m water column)

Water vapour diffusion resistance approx. 500

(μ-value)

Substrate

Suitable substrates

The substrate must be dry, frost-free, solid, weight-bearing, dimensionally stable, free of dust, dirt, oil, grease, separating agents, loose parts, burrs or sharp-edged uneven areas, as well as soils, and must comply with the applicable technical national and European directives, standards and "generally accepted rules of the trade". Defects such as cavities, masonry joints, mortar pockets, and gravel pockets up to 5 mm depth can be levelled out by means of scratch filler. Deeper defects are levelled out with a suitable re-profiling mortar.

Product and processing instructions

Material advice:

- If processing outside the ideal temperature and/or humidity range the material properties could change markedly.
- Bring the materials up to the proper temperature before processing!
- In order to maintain the product properties, do not add any foreign materials!
- Water dosing quantities or dilution information must be strictly adhered to!
- Check tinted products for colour accuracy before application!
- Colour consistency can only be guaranteed within the same batch.
- $\hbox{- The colour formation is significantly impacted by the environmental conditions.}\\$
- Compound seals require at least two layers.
- Already mixed material that is beginning to harden may not be diluted further or mixed with fresh material!

40048, UNIVERSAL SEAL PU 500, valid from: 11.12.2023, Magdalena Riegler, Page 2

TECHNICAL DATA SHEET

Tile laying technology



Environmental information:

- Do not process at temperatures below +5 °C!
- The ideal temperature range for the material, substrate and air is + 15 °C to + 25 °C.
- The ideal relative humidity range is 40% to 60%.
- Increased air humidity and/or lower temperatures may prolong the drying, setting and hardening time, while lower air humidity and/or higher temperatures will speed it up.
- Ensure adequate ventilation during the drying, reaction and hardening phase; avoid draughts!
- Protect against direct sunlight, wind and weather!
- Protect adjacent components!
- Before applying seals, defects and uneven surface areas must be levelled in a separate procedure.

Tips:

- We recommend using a test surface first or a small area for initial, small-scale testing.
- Please heed the product data sheets of all MUREXIN products used in the process.
- Keep a genuine original container of the respective batch for later repair work.
- Compound sealants cannot be used as an alternative to structural sealing.
- Keep any underfloor heating system turned off during processing and hardening.

The information provided reflects average values that were obtained under laboratory conditions. Due to the use of natural raw materials, the indicated values of individual deliveries may vary slightly without impacting the product suitability.

Safety instructions

Please refer to safety data sheet for product-specific information with regard to composition, handling, cleaning, corresponding actions and disposal.

Limiting and monitoring exposure

Personal protective equipment:

General protection and hygiene measures:

- Common safety measures for handling chemicals are to be observed.
- Keep away from foodstuffs, beverages and feedstuffs.
- Take off contaminated, impregnated clothing immediately.
- Wash your hands before taking breaks and when finishing work.
- Do not inhale gases/vapours/aerosols.
- Avoid contact with the eyes and skin.

Breathing protection:

- Use a breathing filter device for short term or minor exposure; for more intensive or longer exposure, use a self-contained breathing apparatus.

Hand protection: protective gloves.

Glove material

- The selection of a suitable glove depends not only on the material, but also on other quality properties, which may vary from manufacturer to manufacturer. As the product is a preparation made up of many materials, the resistance of glove materials cannot be predicted in advance and must therefore be checked before use.

Penetration time of the glove material

- The precise penetration time is to be found out from the protective glove manufacturer and complied with.

Eye protection: protective goggles.

Body protection: protective clothing.

This leaflet is based on extensive experience, is intended to convey the best of our knowledge, is not legally binding and does neither constitute a contractual legal relationship nor a subsidiary obligation resulting from the bill of sale. The quality of our materials is guaranteed within the framework of our general terms and conditions. Our products may be used by professionals and/or experienced and accordingly technically skilled persons only. Users are not released from inquiring in case of uncertainties or from rendering professional workmanship. We recommend using a test surface first or a small area for initial, small-scale testing. Naturally, it is not possible to describe or foresee all possible current and future uses and peculiarities. Information that is assumed to be familiar to experts has been omitted.

Please observe the current, technical, national and European standards, guidelines and data sheets regarding materials, substrates and the subsequent construction. Please contact us if you have any reservations or doubt.

This version is rendered invalid if a new version is released. The most recent data sheets, safety data sheets and the terms and conditions are available online at www.murexin.com.

40048, UNIVERSAL SEAL PU 500, valid from: 11.12.2023, Magdalena Riegler, Page 3