

politech n



politech n is a two-component polyurethane adhesive for laying tiles on deformable substrates. It does not have solvents in its composition and is thus characterized for its superb application with a notched trowel.

Specially recommended for special materials such as metal sheets or synthetic materials, where cement-based adhesives cannot be used. Professional use.

Recommended use

Ceramic wall tiles on substrates not compatible with cement-based adhesives.

Ceramic floor tiles on deformable substrates.

Ceramic floor tiles with special chemical resistance.

Laying of slate and other natural stones with risk of deformation by water absorption.

Installation of coverings not compatible with cement-based adhesives: parquet, rubber floorings, artificial turf, and outdoor PVC coatings.

Substrate waterproofing.

Porcelain tile plate bonding for special floorings.

Materials

Large format ceramics.

Porcelain tiles (water absorption 0.5% as per EN-ISO 10545-3).

Glass mosaic.

Natural stone and marble.

DQS slabs and other kinds of marble agglomerate.

Krion slabs and other kinds of Solid Surface.

Rubber flooring and artificial turf.

Outdoor PVC coatings.

Substrates

Metal sheets.

Wood boards.

Polyester or PVC surfaces.

Plywood boards.

Existing wall tiles.

Cement covered floors and walls.

Concrete covered floors and slabs.

Plasterboards and plaster or anhydrite walls.

Plasterboards.

Glass.

Before applying politech n on a substrate not stated in the previous listing, please perform a test or check with butech's Technical Department.

Characteristics

- Two-component polyurethane adhesive.
- Excellent adherence. Maximum deformability.
- No water absorption. Waterproof.
- High chemical resistance.
- High initial adherence and no sagging. Thixotropic.
- Application thickness up to 6 mm.
- Frost-resistant.
- Professional use.

Certifications / Standards

EN 12004 R2 T



Instructions for use

Preparing the substrate.

The substrate or laying base must be dimensionally stable, without risk of cracking and shrinkage due to mortar setting. In the case of substrates of over 40 mm, and in order to reduce structural movement tensions, we recommend decoupling the substrate using a polyethylene sheet, and making a joint around the whole floor perimeter. Alternatively, we recommend making a fully bonded base with mortar screed.

- Substrates shall meet the appropriate characteristics for laying the tiles on a thin layer with a notched trowel:
- Residual humidity under 3%.
- Clean from dust, grease, or any other substance that may compromise the bonding material adherence.
- Level and flat, deviations under 1 mm every 2 m of surface.

In the case that any of the defects listed above are present, they must be fully corrected before starting to lay the ceramic.

Do not use this adhesive in substrates with risk of climbing moisture.

Preparing the adhesive.

politech n is a two-component adhesive made up of polyurethane putty (component A) and a catalyst (component B). The following are the instructions for preparing this adhesive:

- Use clean containers and tools.
- Mix with a ratio of:
 - **Component A** 10.9 kg. 90.8 %
 - **Component B** 1.1 kg. 9.2 %

Do not add water or any other kind of solvent.

- Pour component B on component A, and mix manually until the catalyst impregnates the polyurethane putty superficially.
- Afterwards, mix with an electric mixer at low rpm (500 rpm) until the mass is creamy, uniform, and without lumps.
- Stir with a hand trowel, and apply.

Applying the adhesive.

For laying ceramic tiles or similar, the only recommended technique for politech n is laying the tiles on a thin layer with a notched trowel. The notched trowel type will depend on the amount of adhesive to use in laying the tiles which, in turn, depends on the tile size, the characteristics of the tile back, and evenness of the laying surface. The following are the instructions for applying this adhesive:

- Spread a thin layer of adhesive on the substrate, with the smooth side of the trowel.
- Apply a second coat and comb with the notched part of the trowel.
- Distribute the grooves of the adhesive in a homogeneous and linear way. It is recommended to apply the adhesive perpendicular to the long side of the tile.
- Before laying the tile clean any element off the back, that could interfere with the bonding of the mortar.
- Check the wettability of the adhesive, and lay the ceramic on the fresh adhesive.
- Lay the tile on the adhesive until you get a uniform and full contact. We recommend pressing the tile with a slight back and forth movement, to squash the adhesive groove and cover the back of the tile.
- Check periodically, by removing an already placed tile, the level of adhesive coverage. We recommend a minimum level of 75 %
- In the case of large formats, outdoors laying, radiant floors, heavy traffic, or overlappings, there must be 100% contact; therefore we recommend using the double bonding method where, besides applying the adhesive on the substrate as mentioned above, a thin layer is applied with the smooth end of the trowel on the back of the tile.
- The maximum adhesive thickness should not exceed 6 mm.
- Once the setting time has passed, clean the installation joints in their full length, width, and depth.

Commissioning.

Let the mortar set for a minimum of 24 hours before sealing the installation joints or allowing transit on a floor laid with **politech n**.

Hardening of the adhesive is influenced by environmental conditions, so that temperatures above 20 ° C speed up its commissioning, while lower temperatures slow it down.

Sealing installation joints.

Before starting to seal the installation joints, make sure the adhesive has finished its initial setting and that the moisture on the tile back has been eliminated, especially when it comes to laying mosaics or large format and low absorption tiles with minimal installation joint

For sealing installation joints, we recommend the professional line of technical mortars **colorstuk** and **epotech** , available in different finishes and colors. Given the importance of the finishing of the installation joints, and the importance that all joints between tiles are sealed, we recommend using extreme care in this work, as well as following scrupulously the joint material manufacturer's instructions.

As general rule, it is not recommended to leave installation joints smaller than 1.5 mm indoors and 5 mm outdoors. There is currently a wide range of spacers and separators that make the work of the ceramic layer easier, but we highly recommend butech's self-leveling separators which, in addition to marking the joint width, avoid the appearance of ledges between tiles, and laying defects.

Coverage

- 3 x 3 Notched trowel 1-2 kg / m²
- 4 x 4 Notched trowel 2-3 kg / m²
- 6 x 6 Notched trowel 3-4 kg / m²
- 8 x 8 Notched trowel 4-5 kg / m²

Cleaning and maintenance

Polyurethane surface stains or film can be removed with organic solvents such as alcohol or acetone.

Clean up any remaining adhesive before it hardens with methylated spirit or acetone. Once the polyurethane putty dries, it can only be removed mechanically.

Once the laying is carried out, clean the tool with plenty of methylated spirit or acetone before the remains harden.

Check the supplier's maintenance instructions for the type of wall covering used.

Before using any solvent, consult its safety sheet and take the recommended safety measures.

Storage

12 months in its original container and protected from moisture and the weather. Store in a dry place, covered and protected from direct sunlight.

Safety and hygiene.

politech n is a corrosive chemical that can also cause an irritant effect on the skin and mucous membranes. Safety data sheets available to the professional user who requests them.

Warnings

The only recommended laying technique is laying the tiles on a thin layer with a notched trowel.

Carry out the laying through the double bonding method on tiles with format greater than 1000 cm², and applications where you need 100% contact between the ceramic and the substrate: outdoor settings, radiant floors, with heavy traffic, or overlappings.

politech n is an adhesive for professional use. Follow scrupulously all instructions for preparing and applying the adhesive.

Using politech n with a thickness greater than 6 mm reduces its overall performance as an adhesive.

Working times depend on the wind, humidity, and temperature workplace conditions, so the working times specified on this sheet may vary regarding those of the place where the work is being carried out.

All adhesives dry up in contact with air, losing their adhesive properties. Therefore, before laying the ceramic on the bonding material, we recommend checking periodically the bonding power of the mortar. Never place the ceramic on the bonding material once the non-adhering surface film is formed. In this case, we recommend combing politech n until the surface adherence is recovered.

Protect from rain and frost at least during the first 8 h.

Do not apply when the temperature is below 10 ° C or higher than 30 ° C.

On outdoor floors, make slopes to ensure correct water drainage.

When laying meshed glass mosaic, check that the adhesive crosses through the back mesh and comes into contact with the mosaic pieces.

The layout, width, and construction details of the perimeter and intermediate movement joints, as well as the materials to be used, should be included in the ceramic tile laying design.

Heed the structural joints present in the substrate.

Make movement perimeter joints in corners, floor level changes, and height differences in material changes.

As a general rule, make intermediate movement joints that delimit areas as square as possible, 16-25 m² indoors, and 50-70 m² outdoors. They shall have a minimum width of 8 mm.

The technical information contained in this technical data sheet has been collected from approved laboratory tests and under the conditions indicated by the corresponding standards.

For more information about this product, check with butech's Technical Department.

Technical Sheet Conditions

This is not a finished product technical sheet. It belongs to a laying material which, together with other products and materials, configures a ceramic tile laying system. Instructions in this technical sheet have been written based on our experience and technical expertise, but they have to be only considered as general recommendations which, together with those for the rest of the products in the system, guide the laying professionals in their job.

As it is not possible to know all the features and conditions of a building job, professionals must consider it and, if deemed appropriate, perform a previous test to confirm whether the product is suitable for the job.

The technical sheet cannot reflect all the applications and conditions entailed in the use of a material, so, in situations not described in this sheet, we recommend to perform a previous test and refer to our technical department.

This sheet has been updated in February, 2024.

Technical data

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| Appearance of Component A | Dense beige colored paste |
| Appearance of Component B | Amber-colored liquid |
| Hazard | See material safety data sheet |
| Flammability | No |
| Storage time | 12 months in a dry place. |
| Proportion of component A | 90.8 % |
| Proportion of component B | 9.2 % |
| Specific weight of the mixture | 1.56 g/cm ³ |
| Viscosity of the mixture | 1,000,000-2,000,000 m Pas |
| Application temperature | from +10 ° C to +30 ° C |
| Durability | < 30 min. |
| Wait for grouting | 24 h. |
| Trafficability | 24 h. |
| Final commissioning | 3 days |
| Heat resistance | -40°C up to +100°C |

Data obtained in standard laboratory conditions, at 20^o C and 50% relative humidity.

References

| SAP | Product description | Packaging | Palletizing |
|-----------|------------------------------------|-----------|----------------|
| 100138260 | politech n 12 kg comp A + B | 12 kg Can | 48 cans/pallet |