

# PENOSIL

## TECHNICAL DATA SHEET

### PENOSIL MultiFix & Fill 821

#### Sustainable adhesive & filling foam

One-component, ready to use multi purpose polyurethane gunfoam for various building applications, e.g. sealing of joints and penetrations, installation of window and door frames, thermal and acoustic insulating, gluing of insulation materials, interior design boards, window sills, etc. Adheres well to most materials like wood, concrete, stone, plaster, metal, PVC and polystyrene.

#### Main benefits

- Contains over 40% of sustainable raw materials
- B1 fire class according to DIN 4102-1
- Low curing pressure and low post expansion
- Very good adhesion
- High thermal and acoustic insulation value

#### Fields of application

- Installation of window and door frames
- Sealing and connection of joints
- Insulation of penetrations
- Fixing of insulation boards on facades and foundations
- Fixing of interior design boards
- Fixing of window sills
- Reducing the impact of thermal bridges

#### Adhering

- Polystyrene
- PIR
- Plasterboards
- OSB
- Chipboard
- Wood
- Concrete



#### Colour

Light purple.

#### Package

1000 ml aerosol can, content 750 ml.

#### Storage conditions and shelf life

Guaranteed shelf life is 12 months from production date if stored in an unopened packaging in a cool and dry place at +5 °C to +30 °C. Do not expose to temperature over +50 °C, do not keep near heat sources or in direct sunlight. Store and transport in upright position. Secure cans before transport.

# PENOSIL MultiFix & Fill 821

## Technical classifications and certificates

- EMICODE® EC 1 Plus - very low emission
- M1 - low emission & odour
- French VOC class A+

## Technical data

| Properties                                                     | Value     | Unit              |
|----------------------------------------------------------------|-----------|-------------------|
| Tack free time (EN 17333-3)                                    | 6...8     | min               |
| Cutting time (30 mm bead, EN 17333-3)                          | <30       | min               |
| Correction time                                                | 7         | min               |
| Load time                                                      | 2         | h                 |
| Fully cured in joint, 3x5 cm (+23 °C)                          | <8        | h                 |
| Curing pressure (EN 17333-2, moistened surfaces)               | <0,5      | kPa               |
| Post expansion (EN 17333-2)                                    | <50       | %                 |
| Density in joint, 3x10 cm (WGM106)                             | 15...19   | kg/m <sup>3</sup> |
| Dimensional stability (EN 17333-2, moistened surfaces)         | <2        | %                 |
| Temperature resistance of cured foam                           | -50...+90 | °C                |
| Fire class of cured foam (DIN 4102-1)                          | B1        |                   |
| Tensile strength / elongation (EN 17333-4, moistened surfaces) | >120/22   | kPa / %           |
| Compression strength (EN 17333-4, moistened surfaces)          | >30       | kPa               |
| Shear strength (EN 17333-4, moistened surfaces)                | >40       | kPa               |
| Thermal conductivity (EN 12667, EN 17333-5)                    | 0,033     | W/(m·K)           |
| Sound reduction index R <sub>st,w</sub> (EN ISO 10140)         | 62        | dB                |
| Water vapour permeability (EN 12086)                           | <0,06     | mg/(m·h·Pa)       |
| Foam yield (EN 17333-1), per 750 ml filling rate               | 48        | l                 |
| Post expansion (8 mm joint)*                                   | <2        | mm                |
| Shear strength (8 mm)*                                         | >80       | kPa               |
| Bond strength (8 mm)*                                          | >0,08     | MPa               |
| Bond strength (8 mm, at temp +5 °C)*                           | >0,10     | MPa               |

The values specified were obtained at +23 °C and 50% relative humidity, unless otherwise specified. These values may vary depending on environmental factors such as temperature, moisture and type of substrates.

\*Tested according to EOTA TR046 - Test methods for foam adhesives for ETICS.

## Application instructions

### Application conditions

Air temperature during use: +5 °C to +30 °C. Make sure the ambient temperature stays within this range until the foam has fully cured. Can temperature during application: +5 °C to +25 °C, best results at +20 °C.

# PENOSIL MultiFix & Fill 821

## Surface preparation

Remove dust, loose particles and oil stains from the surfaces. Moisten dry substrate to ensure better results. Protect adjacent surfaces with paper, plastic film or other suitable material. If needed add additional shield outside for weather protection (against rain, wind, etc.).

## Application method

Shake the can vigorously at least 20 times. Remove the cap. Hold the foam can in upright position with valve up. Screw the can tightly to the gun by holding the gun handle with one hand and turning the can with the other hand. Do not aim the gun at people. Avoid screwing the can to the gun with valve upside down. Do not screw the gun to the can. Do not bend or turn the can during screwing. Hold the can upside down when extruding the foam. Foam output can be adjusted with gun trigger and adjustment screw. Fill joints up to approx. 75%, as the foam expands. In case of larger joints apply foam in several layers and moisten slightly between each layer to ensure better results.

Excess foam can be cut after it has fully cured.

### Instructions for gluing insulation boards and interior design boards

Apply the foam adhesive to boards as an even flow, parallel with the sides of the board (3-4 cm from the edge) and one strip in the middle, parallel to the longest side (up to 25 cm between adhesive strips). After applying the foam adhesive to the board wait 2-3 min and then press the board to the wall. The level of installed boards can be adjusted within up to 5 minutes.

The foam adhesive has sufficient strength for fixing insulation boards. Always follow building design, building regulations, standards or other relevant guidelines concerning additional mechanical fastening when covering insulation boards with cladding materials. Use of insulation support anchors is always recommended.

In general it is not recommended to use this product on bituminous surfaces. In some cases, e.g. fixing insulation boards on bitumen treated foundations before backfilling, the product has sufficient adhesion. Always test before use.

### Fixing of window sills

Before fixing the window sill make sure that the base surface is leveled. Spacers must be used to support the window sill; foam can only be used as an adhesive. Apply foam adhesive to the base surface 3-4 cm from the edge. Weights must be used to fix the window sill until the foam adhesive is cured.

## Cleaning

Use PENOSIL Foam Cleaner to clean tools and surfaces from uncured foam. Hands and clothes can also be cleaned from uncured foam with PENOSIL Cleaning Wipes. Remove cured foam mechanically after softening with PENOSIL Foam Remover.

## Limitations

- PU foam lacks adhesion to Teflon, polyethylene, polypropylene and silicone surfaces.
- It is not advisable to unscrew the gun from the foam canister intermittently. Foam should be used in a way that the gun is screwed on once.
- Cured foam is sensitive to UV-light and direct sunlight and therefore must be covered with suitable opaque sealant, filler, paint or other material. Do not cover before foam has fully cured.
- Please observe the expiration date!

## Safety regulations

Pressurized canister. Use only in well-ventilated areas. Do not smoke during application! Use protective gear when necessary. Keep out of the reach of children.

See label and safety data sheet (SDS) for more information.

# PENOSIL MultiFix & Fill 821

Note: The instructions in the present documentation are based on tests carried out by the manufacturer and are presented in good faith. Due to variations in materials and substrates as well as the various application possibilities that are beyond our control, the manufacturer is not liable for the results achieved. In any case, it is recommended to test the product suitability at the place of application. Manufacturer reserves the right to modify products without prior notice.

This TDS replaces and supersedes all previous data sheets on the same product.

11-08-2026 14:37:15

Wolf Group Head Office  
Suur-Paala 10  
13619 Tallinn  
Estonia

Tel +372 605 9300  
Fax +382 605 9315  
info@penosil.com