# PENOSIL

We save / Molf Group

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## TECHNICAL DATA SHEET PENOSIL ECO Filling Foam 210

One-component, ready to use polyurethane strawfoam for various building applications, e.g. filling of holes, sealing of joints and penetrations, installation of window and door frames, thermal and acoustic insulating. Adheres well to most materials like wood, concrete, stone, plaster, metal, PVC and polystyrene.

- Contains over 50% of sustainable raw materials
- Over 80% of recycled plastic used in the package
- Good volume expansion for effective filling
- Very low curing pressure avoids deformation of building elements
- No shrinkage
- High thermal and acoustic insulation value

#### **Fields of application**

- Filling of holes and gaps
- Insulation of penetrations
- Sealing window and door joints
- Reducing the impact of thermal bridges
- Thermal and sound insulation

#### **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 +30 °C, best results at +20 °C.

#### Surface preparation

Remove dust, loose particles and oil stains from the surfaces. Moisten dry substrate with water mist 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 straw applicator tightly to the foam can valve. Hold the can upside down when extruding the foam. Foam output can be adjusted with the applicator trigger.

Fill joints up to approx. 50%, 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.

#### 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.



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## **Technical data**

| Properties   | Value     | Unit        |
|--|-----------|-------------|
| Tack free time (EN 17333-3)                                    | 610       | min         |
| Cutting time (30 mm bead, EN 17333-3)                          | <60       | min         |
| Fully cured in joint, 3x5cm (+23 °C)                           | <16       | h           |
| Curing pressure (EN 17333-2, moistened surfaces)               | <1,5      | kPa         |
| Post expansion (EN 17333-2)                                    | <140      | %           |
| Density in joint, 3x10cm (WGM106)                              | 1923      | kg/m³       |
| Dimensional stability (EN 17333-2, moistened surfaces)         | <1        | %           |
| Temperature resistance of cured product                        | -50+90    | °C          |
| Reaction to fire classification (EN 13501-1)                   | F         |             |
| Fire class of cured foam (DIN 4102-1)                          | B3        |             |
| Tensile strength / elongation (EN 17333-4, moistened surfaces) | >105 / 12 | kPa / %     |
| Compression strength (EN 17333-4, moistened surfaces)          | >30       | kPa         |
| Shear strength (EN 17333-4, moistened surfaces)                | >50       | 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)                           | <0,04     | mg/(m·h·Pa) |
| Foam yield in joint, 3x5 cm (WGM107), per 750 ml filling rate  | 11        | m           |
| Foam yield (EN 17333-1), per 750 ml filling rate               | 31        |             |

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.

## **Technical classification and certificates**

• EMICODE® EC 1 Plus - very low emission

## Colour

Light yellow.

## Package

800 ml aerosol can, content 600 ml, 12 pcs in a box.

## 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 vertical position. Secure cans before transport.

## Limitations

- PU foam lacks adhesion to Teflon, polyethylene and silicone surfaces.
- 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.
- Lighter construction elements must be firmly fixed before application of the foam due to formula's high post expansion.
- 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.

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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.