

TECHNICAL DATASHEET

PENOSIL Premium Insulation Foam

Polyurethane foam for insulation of buildings, vehicles, vessels and uneven surfaces. Application of the foam is very convenient and fast with the accompanying special nozzle. Cured foam has very good thermal and sound insulation properties. Adheres well to most materials like wood, concrete, stone, plaster, metal, PVC and polystyrene.

Main benefits

- High thermal and acoustic insulation value
- Thickness of insulation layer is freely selectable
- Quick and easy application
- Excellent adhesion to all commonly used building materials

Fields of application

- Thermal and sound insulation
- Reducing the impact of cold bridges
- Prevention of condensation on cold surfaces

Application instruction

Application temperature

Air temperature during use: +10 °C to +30 °C, best results at +20 °C.

Can temperature during application: +18 °C to +28 °C, best results at +20 °C.

Surface preparation

Remove dust, loose particles and grease from the surfaces. Moisten dry substrate to ensure better results. Protect adjacent surfaces with paper, plastic film or other suitable material.

Application method

Put the application nozzle on the tip of the gun. Shake the can vigorously at least 20 times. Hold the foam can in upright position, turn the gun to the can by holding the gun handle with one hand, and turn the can with the other hand. Make sure that the gun is not pointed at other persons when turning it. The can must not be screwed to the gun with the valve upside down or by turning the gun on the can. Rotate the nozzle as needed (for vertical or horizontal application). Turn the can upside down and start applying. Foam output can be adjusted by the gun trigger. Apply the foam from distance of approx. 40 cm from the surface. The application distance determines the width of the application area – the shorter the distance, the narrower the application area. Maximum thickness of the foam in one layer should not exceed 2 cm. Next layer of foam can be applied after approx. 30 minutes, if needed. Number of layers is not limited. When applying foam in layers moisten slightly between each layer, but make sure there are no water drops on the surface before applying foam.

Cleaning

Uncured foam can be removed with acetone, cured foam with mechanical means.

Technical data

Properties	Value	Unit
Tack free time	~5	min
Completely cured	~60	min
Rise time	10-12	min
Post expansion	100	%
Density	up to 20	kg/m ³
Temperature resistance of cured foam	-50...+90	°C
Fire class of cured foam (DIN 4102-1)	B3	
Thermal conductivity	0,039	W/(m·K)
Sound reduction index	60	dB
Output	up to 2	m ² /per can

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

Colour

Light yellow.

Package

Aerosol can 1000 ml, content 810 ml, 12 cans in a box.

Storage and shelf-life

Guaranteed shelf life is 15 months from production date if stored in unopened packaging in a cool and dry place at +5 °C to +30 °C. The foam can must not be stored above +50 °C, nearby heat sources or in direct sunlight. Store and transport in a vertical position.

Limitations

The foam does not adhere to Teflon, polyethylene and silicon surfaces.

Cured foam is sensitive to UV-light and direct sunlight and therefore must be covered with suitable material. Do not use in places with long-lasting direct contact with water as this reduces thermal insulation properties. Spray nozzle is compatible with most foam guns. Always check compatibility before choosing the foam gun.

Safety regulations

Use necessary protective gear (see SDS). Use only in well-ventilated areas. Do not smoke during application! Keep out of the reach of children. When using indoors, ventilate the room after application of foam.

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

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.