PENOSIL
We save energy / Wolf Group

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TECHNICAL DATA SHEET

PENOSIL Window & Door Gunfoam Winter 191

One-component, ready to use polyurethane gun foam for installation of window and door frames, sealing of joints and penetrations, thermal and acoustic insulating. Adheres well to most materials like wood, concrete, stone, plaster, metal, PVC and polystyrene.

- Suitable for use at colder temperatures, from +14 °F
- High yield
- Low curing pressure and moderate post expansion avoid deformation of building elements
- High thermal and acoustic insulation value

Fields of application

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

Application instructions

Application conditions
Air temperature during use: +14 °F to +86 °F. Make sure the ambient temperature stays within this range until the foam has fully cured.
Can temperature during application: +41 °F to +77 °F, best results at +68 °F. Keep the canister at temperature +59 ... +68 ° F for at least 6 hours prior to use to obtain maximum volume output and optimal physical and mechanical properties.

Surface preparation
Remove dust, loose particles, ice and oil stains from the surfaces. Moisten dry substrate with water mist (only at temperatures above zero) 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, snow, 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.
Excess foam can be cut after it has fully cured.

Cleaning
Use Penosil Foam Cleaner to clean tools and surfaces from uncured foam. Hands, clothes and foam gun 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)	6…10	min
Cutting time (30 mm bead, EN 17333-3)	<30	min
Fully cured in joint, 3x5cm (+73 °F)	<8	h
Curing pressure (EN 17333-2, moistened surfaces)	<3,5	kPa
Post expansion (EN 17333-2)	<80	%
Density in joint, 3x10cm (WGM106)	15…19	kg/m^3
Dimensional stability (EN 17333-2, moistened surfaces)	<8	%
Temperature resistance of cured product	-58…+194	°F
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)	>70/17	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)	0,03	W/(m·K)
R-value	4,81	per inch
Sound reduction index $R_{st,w}$ (EN ISO 10140)	62	dB
Water vapour permeability (EN 12086)	<0,06	mg/(m·h·Pa)

The values specified were obtained at +73 °F and 50% relative humidity, unless otherwise specified. These values may vary depending on environmental factors such as temperature, moisture and type of substrates.

Average full curing time in joint

Temperature °F	Time (hours)
+68	8
+41	12
+23	24
+14	48

Technical classification and certificates

- UL Classified

Colour

Light yellow.

Package

23,7 oz aerosol can, 12 pcs in a box.

Storage conditions and shelf life

Guaranteed shelf life is 24 months from production date if stored in an unopened packaging in a cool and dry place at +41 °F to +86 °F. Do not expose to temperature over +122 °F, do not keep near heat sources or in direct sunlight. Store and transport in upright position. Secure cans before transport.

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!

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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.

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.