27 June 2024

FLEXIBLE INSULATION EXPANDING FOAM GUN GRADE

Technical Data

Basis	Polyurethane
Consistency	Stable foam, thixotropic
Curing system	Moisture curing
Skin formation* (EN 17333-3)	7 min
Cutting time (EN 17333-3)	40 min
Free foamed density (EN 17333-1)	Ca. 25 kg/m^3
Air permeability (DIN 18542)	a < 0.1 m^3/[h.m.(daPa)$^{2/3}$]
Water vapor permeability (DIN EN ISO 12572)	μ = 20
Sound insulation (EN ISO 717-1)	62 dB
Thermal conductivity (λ) (EN 12667)	0.035 W/m.K
Box Yield (EN 17333-1)	750 ml yields ca. 30 l of foam
Joint Yield (EN 17333-1)	750 ml yields ca. 21 m of foam
Shrinkage after curing (EN 17333-2)	< 5 %
Expansion after curing (EN 17333-2)	< 5 %
Expansion during curing (EN 17333-2)	Ca. 75 %
Percentage closed cells (ISO 4590)	Ca. 3%
Permanent deformation under pressure (ISO 1856) 50% compression 22h after 1 day recovery	Ca. 6%
Compressive strength (EN 17333-4)	Ca. 15 kPa
Shear strength (EN 17333-4)	Ca. 25 kPa
Tensile strength (DIN 53423)	Ca. 42 kPa
Elongation at break (ISO 37)**	Ca. 25.1 %
Water absorption (EN 29767)	Ca. 0.28 kg/m^2
Temperature resistance**	-40 °C → +90 °C, +120 °C (max 1 hr)
Application temperature	
Can temperature	5 °C → 30 °C
Ambient temperature	-10 °C → 35 °C
Surface temperature	-10 °C → 35 °C

* These values may vary depending on environmental factors such as temperature, moisture, and type of substrates.

** This information relates to fully cured product

Product description

Flexible Insulation Expanding Foam Gun Grade is a one-component, self-expanding, ready to use polyurethane foam with elastic properties, which allow the foam to follow the movement of the joint and keep its insulation properties for many years. Because of the Duravalve, the optimal yield remains over the entire shelf life, even when stored or transported lying down. Flexible Insulation Expanding Foam Gun is filled with HCFC- and CFC-free propellants which are not harmful for the ozone layer.

Properties

- 3 times more flexible then standard PU foam
- Airtight (see IFT-report)
- Water Vapour Open
- Excellent stability (no shrinkage or post-expansion)
- High filling capacity
- Good adhesion on all surfaces (except PE, PP and PTFE).
- High insulation value, thermal and acoustic
- Very good bonding properties.
- Very precise to dose.
- Low expansion
- Elastic and compressible.
- Freon free (not harmless to ozone layer and greenhouse effect)

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- Fast curing
- Not UV-resistant
- Equipped with Duravalve

Applications

- All foam applications in static and not static joints.
- Installing of window and door frames.
- Filling of cavities.
- Sealing of all openings in roof constructions.
- Apply of a sound absorbing layer.
- Improving thermal isolation in cooling systems. .

Packaging

Colour: champagne
Packaging: 750 ml aerosol (net)

Shelf life

At least 24 months in original, unopened packaging in a cool and dry storage place with temperature between +5°C and +25°C.

Substrates

Nature: clean, free of dust and grease
Surface preparation: For optimal adhesion, we recommend to follow a pretreatment procedure. Moisten surfaces with a water sprayer prior to application.

We recommend a preliminary adhesion and compatibility test on every surface.

Application method

Refer to the current Technical Data Sheet on our website prior to use.

Shake the aerosol can for at least 20 seconds. Fit the gun on the adapter.

For non-conventional substrates a preliminary adhesion test is recommended. Fill holes and cavities for 65 %, as the foam will expand.

Repeat shaking regularly during application. If you have to work in layers repeat moistening after each layer. Fresh foam can be removed using Soudal Gun & Foam cleaner or acetone. Prior to using the Gun & Foam cleaner, test whether surfaces are affected or not. Especially plastics and lacquer or paint layers can be sensitive to this. Cured foam can only be removed mechanically or with Soudal PU Remover.

Cleaning: Clean with Soudal Gun & Foam cleaner or acetone immediately after use. Cured Flexible Insulation Expanding Foam Gun Grade can be removed mechanically or with PU Foam Remover. Prior to using the Gun & Foam cleaner, test whether surfaces are affected or not. Especially plastics and lacquer or paint layers can be sensitive to this.
Repair: With the same material.

Health- and Safety Recommendations

Take the usual labour hygiene into account. Always wear gloves and goggles. Remove cured foam mechanically. Never burn away.

Consult label and safety data sheet (SDS) for more information. When vaporizing (for example with a compressor), additional security measures will be required. Use only in well-ventilated areas.

Remarks

- Moisten surfaces with a water sprayer prior to application.
- If you have to work in layers repeat moistening after each layer. For not common surfaces we recommend an adhesion test.

Standards and certifications

- Baustoffklasse E (DIN EN 13501-1) - Prüfzeugnis P-SAC 02/III-164 (MFPA Leipzig)
- Thermal conductivity (DIN 52612) – PB 070598.1 Hu (MPA Bau Hannover)
- Air permeability (DIN 18452) – PB 105334285 (IFT Rosenheim)
- Water vapor permeability (DIN EN ISO 12572) - PB 50933428 (IFT Rosenheim)
- Acoustical insulation (EN ISO 717-1) – PB Z0910-K05-04 (IFT Rosenheim)
- SOCOTEC n° FAC 3032/1
- IFT certified, Reg. Nr. 7031589
- RAL certified, RAL-GZ 711/4 – SO-40-01

Environmental clauses

Leed regulation:
Flexible Insulation Expanding Foam Gun Grade

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conforms to the requirements of LEED. Low –Emitting Materials: Adhesives and Sealants. SCAQMD rule 1168. Complies with USGBC LEED 2009 Credit 4.1: Low-Emitting Materials – Adhesives & Sealants concerning the VOC-content.

Liability

The content of this technical data sheet is the result of tests, monitoring and experience. It is general in nature and does not constitute any liability. It is the responsibility of the user to determine by his own tests whether the product is suitable for the application.