

QUILOSA PROFESSIONAL ORBAFOAM Pro Energy

One-component polyurethane foam specifically designed for energy-efficient insulation of windows and doors - up to 60% heat-loss reduction in joinery insulation. Thanks to its uniquely dense structure, it effectively and permanently reduces thermal bridges and provides superior thermal insulation. PRO ENERGY is an innovative, technologically advanced product that helps save energy.

A low post-expansion foam that provides excellent acoustic insulation (64dB) and that cures after just 25 minutes. This product has an extended shelf life of 18 months and is manufactured in compliance with the requirements of ISO 9001:2008.

BENEFITS

- low foam volume increase (postexpansion)
- standard foam yield
- decreased foam pressure
- standard foam flammability
- no application of foam multipositioning
- high foam adhesion to surface

INTENDED USE

- sealing for window fitting
- sealing for door fitting
- filling in a place where is a risk of thermal bridges
- thermal insulation
- isolation in a place where is a risk of water and air permeability
- sealing roof, wall and floor joints

TECHNICAL DATA

Parameter (+23°C/50% RH)	Value
Full cure time (RB024) [h]	24

Cutting time (EN 17333-3:2020). The result given for a foam strip of 3 cm diameter. [min]	<=30
Acoustic insulation [dB]	64
Flammability class (DIN 4102)	B3
Flammability class (EN 13501-1:2008)	F
Full air tightness to (EN 1026:2001) [Pa]	300
Coefficient of water vapour resistance (EN 1286:21 + 1286:213-7) [μ]	16
Air permeability (EN 1227:21)	class 4
Dimensional stability (EN 17333-2:2020) [%]	<=3
Coefficient U (EN ISO 6946:28) [W/m ² *K]	<=0,50
Air permeability coefficient a (EN 1026:2001) (1200 Pa) [m ³ /[m*h*(daPa) ^{2/3}]]	<=0,1
Heat conductivity coefficient (λ) (RB24) [W/mK]	<=0,033
Secondary increase in volume (post-expansion) (EN 17333-2:2020) [%]	60 - 90
Capacity (free foaming) (RB024) [l]	38 - 45
Watertightness (EN 12208:2001)	class E
Watertightness (EN 1027:2001) [Pa]	1800
Capacity in gap (The value given for a gap with dimensions 35*1000*35 (width *length *depth [mm])) (RB024) [l]	34 - 40
Skin formation time (EN 17333-3:2020) [min]	<=10
Conditions of application	Value
Can / applicator temperature (optimal +20°C) [°C]	+5 - +30
Ambient / surface temperature [°C]	-10 - +35
Colour	Value
Blue	+

METHOD OF USE

Prior to application, read safety instruction presented at the end of TDS and in MSDS.

Surface preparation

- The foam presents adhesion to typical construction materials, such as: brick, concrete, plaster work, wood, metals, styrofoam, hard PVC and rigid PUR.
- The working surface should be cleaned and degreased.
- Secure surfaces exposed to accidental foam contamination.

Product preparation

- Too cold can should be brought to room temperature, e.g. by immersion in warm water with temperature up to 30°C or leaving it in room temperature for at least 24 h.
- Applicator temperature cannot be lower than can temperature.

Application

- Put on protective gloves.
- Vigorously shake the can (10-20 seconds, the valve facing down) to thoroughly mix the components.
- Screw the can onto the applicator.
- Working position of the can is “valve facing down”.
- Vertical gaps should be filled with foam starting at the bottom and moving up.
- Do not fill the entire gap – the foam will increase in volume.
- When sealing doors and windows, keep a minimum distance of 10 mm and a maximum of 30 mm between the opening framing and the door or window frame. Gaps > 30 mm are not recommended. Fill in gaps wider than 30 mm working bottom to top moving from one gap wall to another alternately, creating a zigzag pattern. Gaps > 50 mm are not permitted.
- Stream volume and pace of application is controlled by pressure force on the applicator trigger.
- Should application be interrupted for more than 5 minutes, the applicator nozzle with fresh foam should be cleaned with polyurethane foam cleaner. To do so, place the plastic tube supplied with the dispensing applicator packaging on the dispensing applicator outlet to avoid the formation of mist containing the cleaner and applicator residue during cleaning. Then screw the can with the cleaner onto the dispensing applicator and press the trigger until clear liquid flows out of the applicator. The can should be shaken prior to application. In case of screwing the applicator off the can, the valve should also be cleaned with the cleaner.

Works after completion of application

- Immediately after full foam hardening, it should be secured against exposure to UV rays by using e.g. plaster or paints.
- Clean the dispensing gun thoroughly after the completion of the work. To do so, place the plastic tube supplied with the dispensing gun packaging on the dispensing gun outlet to avoid the formation of mist containing the cleaner and applicator residue during cleaning. Then screw the can with the cleaner onto the dispensing gun and press the trigger until clear liquid flows out of the gun.

Remarks / restriction

- DOOR AND WINDOWS FITTING WITHOUT USING MECHANICAL COUPLING IS FORBIDDEN. LACK OF MECHANICAL COUPLINGS MAY CAUSE DEFORMATION OF THE MOUNTED ELEMENT.
- The curing process is dependent on temperature and humidity. The decrease in ambient temperature within 24 h after the application below the minimum application temperature can affect the quality and / or correctness of the seal.
- Hurried attempts at preliminary treatment may cause irreversible changes in foam structure and its stability and may affect deterioration of foam utility parameters.
- Especially in lower temperatures, it is recommended to leave the applied foam until it is fully hardened. Hurried attempts at preliminary treatment may cause irreversible changes in foam structure and its stability and may affect deterioration of foam utility parameters (e.g. temporary brittleness effect, which disappears spontaneously and permanently after full hardening of the product).
- With the decrease of temperature decreases performance and increases the curing foam.
- Open foam package should be used within 1 week.
- The foam displays lack of adhesion to polyethylene, polypropylene, polyamide, silicone and Teflon.
- Fresh foam should be removed with polyurethane foam cleaner.
- Hardened foam may only be removed mechanically (e.g. with a knife).
- Quality and technical condition of used applicator affect the parameters of final product.
- The foam should not be used in spaces without access of fresh air and poorly ventilated or in places exposed to direct sunlight.

REMARKS / RESTRICTION

All given parameters are based on laboratory tests compliant with internal manufacturer's standards and strongly depend on foam hardening conditions (ca, ambient, surface temperature, quality of used equipment and skills of person applying the foam).

The manufacturer recommends to commence finishing works after full hardening is completed, i.e. after 24 h.

Producer uses test methods approved by FEICA designed to deliver transparent and reproducible test results, ensuring customers have an accurate representation of product performance. FEICA OCF test methods are available at: <http://www.feica.com> (Our industry -> PU Foam (OCF) -> OCF Test Methods). FEICA is a multinational association representing the European adhesive and sealant industry, including one-component foam manufacturers.

TRANSPORT / STORAGE

The foam maintains its usability within 18 months from manufacturing date, provided that it is stored in original packaging in vertical position (valve facing up) in a dry place in temperature +5°C do +30°C . Storage in temperature exceeding +30°C shortens the shelf life of the product, adversely affecting its parameters. The product may be stored in temperature -5°C, no longer however than for 7 days (excluding transport). Storage of foam cans in temperature exceeding + 50°C or in vicinity of open flame is not allowed. Storage of the product in a position other than recommended may result in jamming the valve. The can cannot be squeezed or pierced even when it is empty.

Do not store the foam in the passenger compartment. Transported only in the trunk.

Detailed transport information is included in the Material Safety Data Sheet (MSDS).

Transport temperature	Foam transport period [days]
< -20°C	4
-19°C ÷ -10°C	7
-9°C ÷ -0°C	10

CATALOGUE DATA

Nominal capacity / volume / size	Colour	Number of pieces per collective package	Catalogue Number	Index	EAN Code
750 ml	blue	12	FMS-FENGSSG-QP-45-ml-750-020	10026579	8411729022617

SAFETY AND HEALTH PRECAUTIONS

The information contained herein is offered in good faith based on Producer's research and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information shall not be used in substitution for customer's tests to ensure that Producer's products are fully satisfactory for your specific applications. Producer's sole warranty is that the product will meet its current sales specifications. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. Producer specifically disclaims any other expressed or implied warranty of fitness for a particular purpose or merchantability. Producer disclaims liability for any incidental or consequential damages. Suggestions of use shall not be taken as inducements to infringe any patent.

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