

Polyurethane Foams

WINDOW & DOOR

Polyurethane foam for various type of installations.



- Ideal for thermal and acoustic isolation
- usable from -10 to +35 °C
- Suitable for electrical and hydraulic installations
- Waterproof
- Up to 45 l



APPLICATION AREAS

- Sealing between windows and walls
- Securing door and window frames
- Sound-proofing motor vehicles
- Securing electrical installations
- Insulating pipes
- Plugging gaps between pipes and walls
- Plugging cellular cement walls/ceilings
- Acoustic and thermal insulations

According to CEI 64-8, art. 511.1 Window & Door has successfully passed the 850 °C Glow Wire Test as per CEI EN 60695-2-11 (certificate available on request). It can therefore also be used for fixing electrical conductors and junction boxes.

FEATURES

Window & Door is ideal for sealing and plugging, filling, gluing, securing, insulating and sound-proofing due to its even, mainly closed cell structure, dimensional stability and mechanical properties of the cured foam. The use of

a special mixture of propellants in the formulation enables it to be used at ambient temperatures as low as -10 °C. Furthermore, the fine and uniform cellularity of the hardened foam gives it good thermal insulation and acoustic isolation properties (see test reports of "Istituto Masini 1016-2 008 dated 31.03.2008" and "IFT 16732059 dated 09.22.2006"). It adheres firmly to wood, concrete, brickwork, asbestos cement, metal, glass and plastic with the exception of polyethylene, Teflon and silicone, and the hardened foam may be cut, holed, sanded, painted and plastered. The product awarded the EC 1 Plus label by the GEV association for very low emissions of volatile organic compounds.

WARNINGS

Completely water-saturated substrates and structures prevent the foam from adhering.

The Window & Door can is a pressurized container. Protect from sunlight and do not expose it to temperatures above 50 °C. Do not puncture or burn, even after use. Do not spray over an open flame or on an incandescent element. Keep away from all sources of combustion. No smoking. Keep out of the reach of children. This product contains flammable components, so only use it in well-ventilated areas. There is the risk that explosive vapour/air mixtures may form, especially if more than one canister is used in the same location. Contains diphenylmethane-4,4'-diisocyanate (EEC no. 615-005-00-9). Extremely flammable. Harmful by inhalation. Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of soap and water. Wear suitable protective clothing and gloves. In case of insufficient ventilation wear suitable respiratory equipment. In case of accident or if you feel unwell seek medical advice immediately (show the canister where possible).

INSTRUCTIONS FOR USE

1. Surfaces must be free of oil, grease and dust. Dampen the surface before application to guarantee necessary humidity for the fresh foam to form even cell structure.
2. Remove the protection cap. Insert the can to application gun (T2000 or T500 from Torggler S.r.l.) or in case of manual version insert the extension nozzle on the dispenser. Screw the dispenser with the extension nozzle to the canister valve.
3. Shake the canister for at least 15 seconds before use. Repeat after each working break.
4. Turn the aerosol upside-down so that the valve is facing down, point the extension tube as required and press the dispenser with your fingers. The amount of foam required to fill the cavity depends on the subsequent expansion of the foam. In the case of low ambient humidity, moisten the kerbs immediately after extrusion.
5. The foam hardens completely in just approximately one hour after laying. After this time any excess material can be cut or sanded away.
6. If the canister is not completely emptied, return it to an upright position and press the nozzle for a few seconds. The gas which escapes will clean the valve and spray gun.

Cleaning

Traces of uncured foam on clothing, doors, window frames, etc. can be removed with specific solvent. Hardened foam can only be removed mechanically (e.g. by scraping or sanding).

Observations

The yield of the foam depends greatly on the temperature, the canister and the substrate. At low temperatures both the output pressure of fresh material from the valve and the amount of hardened foam are reduced. To obtain a good yield, it is recommended that the canister be at a temperature of approx. 20°C. At higher temperatures it can be difficult to dose the product correctly, as the increase in pressure inside the cylinder makes it less easy to control the escape of material from the valve.

TECHNICAL SPECIFICATIONS

PARAMETER AND TEST METHOD	MANUAL	GUN
External temperature during application	from -10°C to +35°C	from -10°C to +35°C
Operating temperature	from -40°C to +120°C	from -40°C to +120°C
Skin-over at 23 °C and 50% RH (MIT 87*)	10 -13 minutes	9 - 10 minutes

Cutting of 20 mm diameter bead at 23°C and 50% (MIT R/08*)	approx. 25 minutes	approx. 20 minutes
Density (after non-free foaming) (MIT 50*)	21 kg/m ³	15 kg/m ³
Indicative yield	45 l	45 l
% Post-expansion kerb	20 – 25 %	15 – 20 %
Tear strenght	approx. 10 N/cm ²	approx. 10 N/cm ²
Shear strength at 10% deformation: (at 23 °C and 50 % U.R.)	approx. 4 N/cm ²	approx. 4 N/cm ²
Linear dimensional variation: (23°C – 50% U.R.) (MIT 52*)	<3%	<3%
Fire resistance (DIN 4102)	B2	B2
Water resistance	excellent	excellent
Detergent resistance	excellent	excellent
Chemical agent resistance	good	good
UV ray resistance	poor	poor
Micro-organism resistance	excellent	excellent

Application	Gun application, Manual application
Packaging size	12x750 ml
Pallet	42 cardboards
Color	Natural yellow
Packaging	can

CONSUMPTION

Free expansion: up to 45 litres.

Non-free expansion: up to 35 litres.

The values indicated refer to laboratory conditions and they can vary significantly depending on the application and ambient conditions.

STORAGE

Keep in a cool place in an upright position. Avoid storing the canister in a horizontal position, as incrustations rapidly form under the valve which will irreparably compromise the extrusion of the foam. Window & Door has a shelf life of at least 18 months if stored upright in a cool (at a temperature below 25°C) and dry place.

CERTIFICATIONS

TECHNICAL NORMATIVE REFERENCE	DETERMINATIONS
Soundproofing coefficients RST,W (IFT SC-01)	61 dB (10 mm wide joint) 62 dB (20 mm wide joint)
Thermal conductivity λ (EN 12667)	0,036 W/(m*K)
CEI EN 60695-2-11	850 °C glow wire resistance
GEV Emicode – VOC determination	EC1 plus (very low emissions)



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