

Polyurethane Foams

VOLT

Glow wire resistant polyurethane foam for electrical installations.



- Ideal for fixing junction boxes and cable conduitsCan be used up to an environmental temperature
- of -10 °C • Prevents the formation of thermal and acoustic

bridges in sealed joints between cable conduits and brickwork

• Very low VOC emissions: ideal for interior applications



APPLICATION AREAS

- Fixing of cable conduits and junction boxes/electrical installations
- Insulation of corrugated pipes on floor and wall surfaces
- Sealing of joints between cable ducts and walls

FEATURES

Volt is a one-component polyurethane foam in an aerosol can specially developed for fixing and sealing junction boxes, cable conduits and electrical installations in general. After polymerisation and perfect curing, the foam is resistant to glow wire according to the Glow Wire Test at +850 °C (reference document CEI EN 60695-2-10 (2014-03) – CEI EN 60695-2-11 (2014-08) – test report no.RSP30580 of 22/07/22 Laboratorio Sala Prove BTICINO VARESE).

Screwing the can onto the T2000 (or T500) professional foam gun releases a foaming mass that increases its volume by reacting with atmospheric humidity, loses its initial tackiness, hardens and transforms into a semisolid, waterproof foam. Adheres permanently to wood, concrete, brick, cement, asbestos, metal, glass and plastic with the exception of polyethylene, Teflon and silicone. Thanks to the dimensional stability and mechanical properties of the cured product, it is ideal for bonding, fixing, insulating, soundproofing, sealing and closing the components of an electrical installation, both on the wall and on the floor. The uniform, predominantly closed cell structure also gives the cured foam heat and sound insulating properties. The cured foam can be cut, drilled, sanded, painted and plastered. Due to the use of a special propellant mixture in the formulation, it can also be used at particularly low ambient temperatures of up to -10 °C. After curing, the product is certified with very low emissions of volatile organic substances (EC1 Plus by GEV) and is perfect for indoor use.

WARNINGS

The yield of the foam is strongly dependent on the cylinder and substrate temperature. At low temperatures, both the discharge pressure of the material from the valve and the yield of cured foam are reduced. To achieve a good yield, we recommend storing the cylinder at a temperature of approx. +20 °C and never below +5 °C. At higher temperatures, it can be difficult to dispense the product correctly, as the increased pressure inside the cylinder makes it less easy to control the material coming out of the valve.

Completely soaked substrates and components prevent the foam from adhering. The can is under pressure. Protect from sunlight and from heating above 50 °C. Do not open by force or burn even after use. Do not spray against flames or incandescent bodies. Keep away from sources of ignition. Do not smoke. Do not inhale. Keep out of reach of children. This product contains highly flammable ingredients, so use only in well-ventilated areas. In particular, if several cans are used in one place, formation of an explosive air/gas mixture is possible. Contains: Diphenylmethane diisocyanate, isomers and homologues; ALKANE, C14-17-, CHLOR-; TRIS (2-CHLORISOPROPYL) PHOSPHATE. Harmful by inhalation. Irritating to eyes, skin and respiratory system. May cause sensitisation by inhalation and skin contact. Do not inhale aerosols. 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 gloves and clothing. In case of insufficient ventilation wear suitable respiratory protection (for example type A1 according to EN 14387). In case of accident or nausea, seek medical advice immediately (show label if possible). From 24 August 2023, appropriate training is required before industrial or professional use.

INSTRUCTIONS FOR USE

- 1. The substrate must be free of oil, grease, dust and loose material. Slightly moisten the substrate to give the applied foam the necessary moisture to form an even cell structure.
- 2. Remove the protective cap from the can and screw on the appropriate gun (type T2000 or T500 from Torggler S.r.l.).
- 3. Shake the can vigorously for at least 15 seconds before use. This must also be repeated after each work interruption.
- 4. During application, hold the can upside down if possible. Point the tip of the foam gun in the desired direction and apply. When applying, the post-expansion must be taken into account.
- 5. For deep cavities, apply the foam in layers and wait until the bottom layer has hardened.
- 6. The foam is fully cured approx. one hour after application. After this time, the excess material can either be cut off or sanded off. In any case, the foam must be protected from UV radiation.
- 7. If the ambient humidity is low, the strand should be moistened immediately after extrusion. This accelerates the curing speed and increases the post-expansion of the foam.

Cleaning

Freshly applied and excess foam or traces of uncured foam on clothing, tools, substrates, etc. can be removed with cleaner for polyurethane foam. Cured foam can only be removed mechanically (by scraping or sanding). If the contents of a canister are not completely used up, the canister must be returned to the upright position and the nozzle pressed for a few moments. The escaping gas cleans the valve and the gun.

PARAMETER AND TEST METHOD	VALUE
External temperature during application	from -10 °C to +35 °C
Operating temperature	from -40 °C to +120 °C
Curing time (at +23 °C and 50% r.H.) (MIT 87*)	9–10 minutes
Cutting (Strand with diameter 20 mm at +23 °C and 50% r.H.) (MIT R/08*)	approx. 20 minutes
Density (after non-free foaming) (MIT 50*)	15 kg/m ³
Tensile strength	approx. 10 N/cm ²

TECHNICAL SPECIFICATIONS

Shear strength (at +23 °C and 50% r.H.)	approx. 5 N/cm ²
Shear stress at 10% deformation (at +23 °C and 50% r.H.)	approx. 4 N/cm ²
Linear dimensional stability (at +23 °C and 50% r.H.) (MIT 52*)	< 3 %
Resistance to fire (DIN 4102)	B2
Water resistance	excellent
Resistance to cleaning agents	excellent
Chemical agent resistance	good
Resistance to UV rays	poor
Micro-organism resistance	excellent

* I Torggler internal methods are available on request.

Application	Gun application
Packaging	can
Packaging size	12x750 ml
Pallet	70 cardboards
Color	White

CONSUMPTION

Yield in litres free expansion: 45 l

Linear metres achieved with one can: 45

The stated values refer to laboratory conditions and can deviate considerably depending on the actual application and ambient conditions.

STORAGE

Store upright and protected from direct sunlight. Horizontal storage must be avoided at all costs, as otherwise deposits will quickly form under the valve, which will irrevocably impair foam extrusion. Shelf life at least 18 months when stored upright, cool (below +25 °C), dry and in the original closed packaging. The expiry date indicated on the can must be observed.

CERTIFICATIONS

REFERENCE	WERT
CEI EN 60695-2-10 (2014-03) CEI EN 60695-2-11 (2014-08)	Glow Wire Test +850 °C
GEV Emicode – VOC Regulation	EC1 Plus (very low emissions)
DIN 4102 – Fire resistance	B2

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