

Torggler

Sealants and Adhesives

HYBRID HM

Single-component, hybrid polymer-based adhesive-sealant with anti mould agent for overpaintable elastic bonding and sealing of joints in construction and industry in general.



- Overpaintable
- Suitable for indoor and outdoor use, also on moist substrates
- Ideal for both construction and industry
- Very low emissions of Volatile Organic Compounds



APPLICATION AREAS

Joints between construction elements, vertical and horizontal. Once hardened, it can be painted over and, in its crystalline form, it is completely transparent. It guarantees good weather resistance and excellent adhesion to smooth and porous surfaces, even damp ones, provided they are free of grease and dust: glass, rigid plastics, metal substrates, plasterboard, masonry, wood, fibre cement boards, etc. It does not corrode metals, does not reduce its initial volume and retains its elasticity even at low temperatures without stressing the joint flanks. It is also particularly suitable for high-strength bonding of elements subject to thermal expansion or mechanical vibration/stress.

MAXIMUM ATTAINABLE THICKNESSES

Joint dimensioning:

Minimum width = 6 mm.

For widths up to 10 mm, the depth must be equal to the width of the joint, but not less than 6 mm.

For widths from 10 to 20 mm the depth must be at least 10 mm.

For widths over 20 mm the depth must be half the width.

FEATURES

Hybrid HM is a high-quality, professional adhesive-sealant based on hybrid polymers, which cures by reaction with moisture to form a permanently elastic mass that does not shrink or swell. It absorbs vibrations and acoustically insulates bonded elements. The presence of an anti-microbial and anti-algal agent in the formulation makes it suitable for use in sanitary environments. It is also resistant to UV rays, ageing in general, chemical agents and water stagnation. It adheres to all typical building and industrial materials, natural and synthetic, smooth and porous, even wet, provided they are clean, degreased and compact. It does not produce substances that can corrode metal substrates and does not develop unpleasant odours. It is free of solvents and isocyanates. The product is certified as EC1 Plus by the GEV organisation in terms of very low emissions of volatile organic substances.

WARNINGS

- Do not apply at temperatures below 0 °C.
- Do not use in constantly wet environments, in continuous contact with water or chlorine.
- Extended exposure to UV rays may cause yellowing.
- In the case of application on plastic or otherwise dubious substrates, check the adhesion of Hybrid HM with preliminary tests.
- Clean tools with paper and alcohol while Hybrid HM is still fresh, mechanically after curing.
- Not suitable for: PE, PP, PMMA, PTFE, polycarbonate, soft plastics, neoprene and bituminous surfaces.

INSTRUCTIONS FOR USE

Use as a sealant:

1. The joint flanks must be solid, clean, degreased and consistent.
2. Insert the Synthetic Plugging Cord to ensure the correct proportioning of the sealant and non-adhesion at the bottom of the joint.
3. Protect the edges of the joint with self-adhesive paper tape.
4. Cut the nozzle to a diameter proportional to the joint size.
5. Inject an excess amount of Hybrid HM.
6. Smooth with a small spatula moistened with Smooth smoothing agent before surface filming begins. Apply pressure so that the sealant fills without voids and completely adheres to the joint flanks.
7. Remove the protective tape immediately.

Use as an adhesive:

1. Surfaces must be solid, clean, degreased and consistent.
2. Insert the cartridge/bag into the cartridge gun, open it, screw on the nozzle and cut it according to the quantity to be extruded.
3. Spread the adhesive with a suitable notched trowel in sufficient quantity to cover the bonding area.
4. To ensure adequate elasticity of the adhesive layer, apply a thickness of 2 mm.
5. Bring the materials into position and glue before spinning the surface.
6. Fasten the bodies externally to support their weight during the first 24 hours.

Cleaning the tools

Clean tools with paper and alcohol while Hybrid HM is still fresh, mechanically after curing.

TECHNICAL SPECIFICATIONS

PARAMETER AND TEST METHOD	WHITE, GREY, BLACK	CRYSTAL CLEAR
Density (UNI 8490 – Part 2^)	1,428 g/ml	1,057 g/ml
Extrusion speed (MIT 30)	29 g	40,79 g
Application temperature	+5 °C to +30 °C	+5 °C to +30 °C
Skin-over time (MIT 33)	20 minutes	10 minutes
Curing speed (+23 °C – 50% r.h.)	2-3 mm/24 h	4 mm/24 h
Slip resistance (EN ISO 7390)	≤ 3 mm	≤ 3 mm

Operating temperature	-30 °C to +80 °C	-30 °C to +80 °C
Surface hardness Shore A (ISO 868)	47	35 ± 5
Variation in volume (MIT 057)	3,2%	3,5%
Mass variation (MIT 057)	1,8%	2,6%
Elongation to break (DIN 53504 – S2)	390%	300%
Tensile load at break (DIN 53504 – S3A)	1,46 MPa	–
Tensile load at break (DIN 53504 – S2)	–	2,4 MPa
Modulus of elasticity at 100% (DIN 53504 – S3A)	0,83 MPa	–
Modulus of elasticity at 100% (DIN 53504 – S2)	–	0,9 MPa
Maximum operating elongation (ISO 11600)	20%	7,5%
Color	Black 9005, Crystal clear, Grey 7004, White 9016	
Packaging size	12x290 ml, 20x600 ml	
Packaging	cartridge, foil bag	
Pallet	116 cardboards, 36 cardboards	

CONSUMPTION

Indicative yield in running metres of one cartridge/foil bag of sealant = $V / (L \times P)$.

V = Cartridge/bag content in ml

L = Sealing width in mm

P = Sealing depth in mm

When applied with a notched trowel as an adhesive, consumption varies depending on the roughness of the substrate.

The estimated bonding surface area with one cartridge is 0.33 m²; with one bag, 0.68 m² (approximately 875 ml/m²).

STORAGE

Store in a dry place, protected from frost and heat. In the original unopened packaging and protected from UV rays it will keep for at least 12 months.

CERTIFICATIONS

REFERENCE	DESCRIPTION
EN 15651-1: 2012	F EXT/INT 20 HM: Sealant for non-structural joints for façade applications. Indoor and outdoor use.
EN 15651-3: 2012	S2: Sealant for non-structural joints for use in sanitary environments.
Emissions COV – GEV Emicode	EC1 Plus

CE

20

Torggler S.r.l., Via Prati Nuovi 9, I – 39020 Marlengo (BZ)
DoP n° 0143/20
EN 15651-1:2012
EN 15651-3:2012
NB n° 1292

EN 15651-1:2012: Sigillante per facciate per applicazione all'interno ed esterno (F-EXT/INT 20 HM)
EN 15651-3:2012: Sigillante non strutturale per giunti per impieghi sanitari (S1)

Reazione al fuoco		E	EN 15651-1:2012 EN 15651-3:2012
Rilascio di sostanze pericolose per la salute e l'ambiente		NPD	
Durabilità		Prova Superata	
Impermeabilità all'acqua ed all'aria	Resistenza al flusso / allo scorrimento	≤ 3 mm	EN 15651-1:2012
	Perdita di volume	≤ 10%	
	Proprietà a trazione (cioè allungamento): in condizioni di estensione mantenuta dopo immersione in acqua a 23 °C	NF	EN 15651-1:2012
Crescita microbiologica		1	EN 15651-3:2012

CE

20

Torggler S.r.l., Via Prati Nuovi 9, I – 39020 Marlengo (BZ)
DoP n° 0142/20
EN 15651-1:2012
EN 15651-3:2012
NB n° 1292

EN 15651-1:2012: Sigillante per facciate per applicazione all'interno ed esterno (F-EXT/INT-7,5P)
EN 15651-3:2012: Sigillante non strutturale per giunti per impieghi sanitari (S1)

Reazione al fuoco		F	EN 15651-1:2012 EN 15651-3:2012
Rilascio di sostanze pericolose per la salute e l'ambiente		NPD	

Durabilità		Prova Superata	
Impermeabilità all'acqua ed all'aria	Resistenza al flusso / allo scorrimento	≤ 3 mm	
	Perdita di volume	≤ 10%	
	Proprietà a trazione (cioè allungamento): dopo immersione in acqua a 23 °C	≥ 25%	EN 15651-1:2012
Crescita microbiologica		1	EN 15651-3:2012

The information contained in this document is reported on the basis of our experience and knowledge; therefore, any recommendations and suggestions made are without any guarantee and must be verified before using the product by those who intend to use it, who assume all responsibility that may result from its use since the conditions of use are not under our direct control. In case of doubt, it is always advisable to make preliminary tests and/or ask for the intervention of our technicians. Torggler reserves the right to modify, replace and/or delete the items, as well as to change the product data in this document without prior notice; in this case the indications given here may no longer be valid. Always refer to the latest version of the data sheet, available at www.torggler.com. Version 27.06.2024.