

# Torggler

## Hybrid Sealants and Adhesives

# STRONG

**Super strong, hybrid polymer adhesive with high initial tack. No need of external mechanical fixture during hardening.**



- Suitable for substrates subject to vibrations
- High mechanical resistance
- Resistant to atmospheric agents
- Adheres without primer even on damp substrates
- Paintable
- Suitable for installation of mirrors



## FEATURES

Strong is a high-quality professional adhesive with a very strong initial adhesion which hardens by reaction with moisture, forming a permanently elastic mass. The product does not shrink or swell. It is free of isocyanates, solvents and silicones, does not produce substances which can corrode metal and does not emit unpleasant odours. The product awarded the EC 1 Plus label by the GEV association for very low emissions of volatile organic compounds.

## WARNINGS

Hybrid Adhesive Strong is not suitable for: PE, PP, PMMA, PTFE, polycarbonate, soft plastic materials, neoprene and bituminous surfaces. Do not use in contact with chlorine (swimming pools). It is not suitable for use as a sealant: for connection joints Hybrid Adhesive General Use is preferred; in the case of dilation joints, however, we recommend use of a silicone-based sealant with a low modulus of elasticity, such as Silicone Low Modulus.

## INSTRUCTIONS FOR USE

Application temperature of both the environment and the materials can vary from +5 to +40 °C. Substrates must be solid, clean and free of oils or dust.

1. Place the cartridge in the application gun, using possibly a reinforced transmission gun and insert the nozzle. Apply the product with the V-nozzle positioned up and away from application direction.
2. Apply the adhesive in parallel vertical lines at a distance of about 10-20 cm (depends on the weight of the to be bonded element). During the extrusion the gun must be held in a perpendicular position in relation to the substrate, so that the product is on his base 8 mm wide.
3. Place the materials in position and press forcefully so that the adhesive has a thickness of at least 2-3 mm. To improve the result plastic spacers should be used. Do not spot-apply the product.
4. Owing to its very strong initial adhesion, it normally needs no external mechanical fixture during hardening (for bonding particularly heavy elements are advised). In any case carry out preliminary tests for adhesion.

#### Cleaning of tools

While the material is in the plastic state use solvents; following setting clean only mechanically. For further information contact Torggler technical assistance.


#### TECHNICAL SPECIFICATIONS

PARAMETER AND REFERENCE STANDARD	VALUE
Base	hybrid polymers
Density (ISO 1183-1)	1,6 g/ml
Application temperature	from +5 °C to +40 °C
Skin-over time (MIT 33*)	5-10 minutes
Hardening rate from the outside to the inside at 23 °C (MIT 32*)	approx. 2 – 3 mm/24 h
Operating temperature	from -40 °C to +90 °C
Shore A hardness (ISO 868)	55
Elongation at break (DIN 53504 S2)	300%
Modulus of elasticity at 100% (DIN 53504 S2)	1,4 N/mm <sup>2</sup>
Failure load (DIN 53504 S2)	2,2 N/mm <sup>2</sup>
Extrusion speed (MIT 030*)	approx. 1 g
Initial shear strength (EN 12004-2 point 4)	1,16 N/mm <sup>2</sup>
Shear adhesion strength after water immersion EN 12004-2 point 4	0,6 N/mm <sup>2</sup>
Shear adhesion strength after action of heat (EN 12004-2 point 4)	1,21 N/mm <sup>2</sup>
Mass variation (MIT 057*)	2%
Volume variation (MIT 057*)	4%
Creep resistance (ISO 7390)	< 2 mm
Frost resistance during transport	down to -15 °C

\* The Torggler Internal Methods (MIT) are available on request.

Color	White
Packaging	cartridge
Packaging size	12x290 ml
Pallet	104 cardboards

#### STORAGE



Hybrid Adhesive Strong must be stored in a shaded place at between +5° and +25 °C. Stored in these conditions the sealed product will keep for at least 18 months.

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](http://www.torggler.com). Version 26.07.2021.