

Sealants and Adhesives

POLYCARBONATE

Neutral cured silicone sealant for polycarbonate elements.



- Good adhesion
- High elasticity
- Resistant to UV rays
- Colour: transparent



APPLICATION AREAS

The neutral curing properties of Polycarbonate ensure that it does not emit hazardous or unpleasant odours. The product is therefore suitable for use in closed environments such as industrial facilities. It is ideal for the installation of polycarbonate sheets and plugging as well as for roofing, greenhouses, windows, skylights and solar panels. Preliminary tests should be conducted to check adhesion when using treated polycarbonate (UV proof).

FEATURES

Polycarbonate is specially formulated to meet the installation requirements for polycarbonate sheets. The product adheres perfectly, even without Primer Silicone, and sets quickly. It also provides good adhesion on non-porous substrates such as glass, porcelain, enamel, plastic and metal. Its exceptional resistance to UV rays, weathering and ageing, its excellent adhesive properties and high elasticity ensure maximum resistance over time. Polycarbonate is classified as a non-structural glazing sealant (type G) according to EN 15651-2.

INSTRUCTIONS FOR USE

1. Application surfaces such as frames must be clean, degreased and dry.

2. Insert the cartridge in the gun, open the cartridge, screw on the applicator nozzle and cut the end off the nozzle to produce a suitable opening.
3. Inject a generous amount of the sealant.
4. Position the polycarbonate sheets on the frame.
5. Secure the sheets with nuts and bolts.
6. Seal the heads of the nuts and bolts and then apply the sealant between the frame and polycarbonate sheets to create a shell.

Sizes of the joint

Minimum depth = 6 mm. For thicknesses up to 10 mm the depth must be equal to the thickness of the joint and in any event not less than 6 mm. For thicknesses from 10 to 20 mm = at least 10 mm. For thicknesses greater than 20 mm = at least half the thickness.

Cleaning tools

Use solvents when the sealant is still wet; after setting only mechanically.

Note

Polycarbonate is not suitable for structural gluing.

TECHNICAL SPECIFICATIONS

PARAMETER AND TEST METHOD	VALUE
Density (ISO 1183-1)	1,02 g/ml
Application temperature	+5 °C to +40 °C
Skin-over time (MIT 33*)	approx. 20 minutes
Curing rate from the outside inwards at 23 °C (MIT 32*)	approx. 4,0 mm in 24 hours
Operating temperature	-50 °C to +200 °C
Shore A hardness (DIN 53505)	approx. 20
Extension to breaking (DIN 53504 – Punch S3)	860%
Tensile strength (DIN 53504 -Punch S3)	1,17 N/mm ²
Modulus of elasticity at 100% (DIN 53504 -Punch S3)	0,28 N/mm ²
Extension to breaking (EN ISO 8339/A – Glass support – G, Al)	170%
Tensile strength (EN ISO 8339/A – Glass support – G, Al)	0,38 N/mm ²
Modulus of elasticity at 100% (EN ISO 8339/A – Glass support – G, Al)	0,31 N/mm ²
Maximum application extension	25%
Resistance to acids	excellent
Resistance to bases	excellent
Odour after curing	none

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

ESTIMATED CONSUMPTION TABLE		
JOINT WIDTH X DEPTH (MM)	CONSUMPTION PER LINEAR METER	LINEAR METERS REALIZED WITH ONE CARTRIDGE
6x6	36 ml	8,7
8x8	64 ml	4,9

10x10	100 ml	3,1
15x10	150 ml	2,1
20x10	200 ml	1,5


Packaging	cartridge
Packaging size	24x310 ml
Pallet	64 cardboards
Color	Transparent

STORAGE

Polycarbonate must be stored in a dry and cool place. Under these conditions the product is stable for at least 12 months. Half-used cartridges can be saved for approximately three months if closed properly

CERTIFICATIONS

The declarations of performance are available on request.

			
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Torggler S.r.l., Via Prati Nuovi 9, I – 39020 Marlengo (BZ) DoP n° 0059/14 EN 15651-1:2012 EN 15651-2:2012 NB n° 1292			
EN 15651-1:2012: Sealants for façade for joints in exterior/interior applications also used in cold climate areas (F-EXT/INT-CC – 25 LM) EN 15651-2:2012: Sealants for joints for glazing applications also used in cold climate areas (G-CC 20 LM)			
Reaction to fire		E	EN 15651-1:2012 EN 15651-2:2012
Release of chemical dangerous to the environment and health		NPD	
Durability		Pass	
Water tightness and air tightness	Resistance to flow	≤ 3 mm	
	Loss of volume	≤ 10%	
	Tensile properties at maintained extension after water immersion at 23°C	NF	EN 15651-1:2012
	Tensile properties at maintained extension at -30°C	NF	EN 15651-1:2012 EN 15651-2:2012
	Tensile properties (secant modulus) at -30°C	≤ 0,9 MPa	

	Adhesion/cohesion properties after exposure to heat, water and artificial light	NF	EN 15651-2:2012
	Elastic Recovery	≥60%	EN 15651-2:2012

LEGEND FOR CLASSIFICATION ACCORDING TO EN 15651

F	Sealant for non-structural joints for the building trade, on facades. (F = facade elements)
INT	Sealant for internal use only.
EXT-INT	Sealant for internal and external use.
CC	Sealant tested for cold climates. (CC = cold climate - testing done at -30 °C)
G	Sealant for non-structural joints on glazing and door and window frames. (G = glazing)
S	Sealant for non-structural joints in bathroom installations. (S = sanitary joints)
XS	Sealant for joints in bathroom installations with improved performance.
PW	Sealant for non-structural joints on pedestrian walkways. (PW = pedestrian walkways)

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 16.07.2021.