

# Torggler

## Sealants and Adhesives

# TACK PU

**Single-component, fast-setting polyurethane adhesive with maximum strength for joining corners with brackets on aluminium systems. Also suitable for applications in the marine industry.**



- Excellent adhesion to aluminium and other surfaces, even damp ones
- Quick curing
- Easy and fast bonding without perforating the substrates
- High final mechanical resistance
- Sandable and paintable
- Waterproof and resistant to atmospheric agents
- Suitable for bead and trowel applications
- Odourless and solvent-free
- Suitable for structural bonding of wood in ship building

### APPLICATION AREAS

Tack PU is a single-component, quick-hardening polyurethane adhesive ideal for the tenacious bonding of corner profiles of aluminium frames, doors and metal structures, caulking and other applications where it is required to achieve high adhesive and mechanical performance in a short time. Formulated to perform almost instantaneous bonding of a variety of construction elements in industry, carpentry, construction, joinery, do-it-yourself and wherever chemical, physical and mechanical resistance, ease of use, cleanliness and rapid start-up are required. Thanks to its thixotropy, it is suitable for vertical applications, without dripping, on wood, metal and cementitious substrates.

### TYPES OF SUBSTRATE

Tack PU adheres firmly and without the use of primer to porous (load-bearing) materials:

- Brick masonry
- Marble and natural stone
- Artificial stone (Corian, various agglomerates, etc.)
- Concrete

- Plaster
- Wood and derived products
- Covering panels
- Insulation panels in PU, mineral wool, EPS, fibre cement, plasterboard, non-porous materials
- Painted and unpainted metal (stainless steel, aluminium, iron, copper, etc.)
- Plastic materials (fibreglass, PVC, PMMA, ABS, Polyester)
- Glass
- Enamelled and porcelain surfaces

## MAXIMUM ATTAINABLE THICKNESSES

Applied in thin thickness it develops maximum mechanical strengths.

## FEATURES

Tack PU is a solvent-free, single-component, polyurethane-based mounting adhesive that cures by reaction with air humidity. To ensure controlled hardening, when gluing non-absorbent materials or materials with less than 8% humidity, it is advisable to slightly moisten the substrates or beads by spraying water (about 10 g water/m<sup>2</sup> for 150 g adhesive/m<sup>2</sup>). It does not develop unpleasant odours during application, it does not release acid or basic substances that can corrode metal substrates and it does not affect paints. High viscosity and thixotropy, excellent adhesion on porous and smooth/non-porous substrates, even damp ones, provided they are clean and consistent. The slight increase in volume after application helps to increase the adhesion surface and overall mechanical strength. Once applied to one of the two elements, assembly must be performed before the skin is formed. Once hardened, it guarantees high adhesive strength, high resistance to atmospheric agents, UV rays, impermeability, sandability and paintability.

## WARNINGS

Substrates and structures completely saturated with water prevent adhesion. Due to the wide variety of paints and substrates used in construction and industry, it is recommended to carry out preliminary tests to check adhesion.

Keep out of the reach of children.

Wear protective gloves / clothing and protect eyes / face.

In case of contact with skin, wash immediately with plenty of soap and water.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. For more information and in any case before using the product, consult the safety data sheet.

## INSTRUCTIONS FOR USE

The substrates to be bonded must be clean, degreased, dust-free and consistent (load-bearing). Insert the cartridge into the appropriate gun, open it, screw on the nozzle and cut the tip so as to obtain a sufficient opening. The best performances are obtained when using thin film and not thick film, therefore apply Tack PU on one of the two surfaces in spaced beads, distributing it if necessary with a spatula (also toothed). For optimal bonding, 150 g/m<sup>2</sup> is required. Glue the two parts before Tack PU threads. The thinner the adhesive layer after compression, the higher its tensile strength. Remove any excess along the perimeter and clean immediately with solvent (or after curing only mechanically) Despite the high viscosity of the adhesive, provide temporary mechanical fixing using clamps to counteract post-expansion and to obtain maximum shear performance During curing, normal ambient humidity must be guaranteed. After approx. 24 hours (at 23 °C) the adhesive will be sufficiently hardened; until then, maintain mechanical fixation.

### Tool cleaning

Clean tools in the plastic state of the adhesive with acetone or solvents; after hardening it can be cleaned only mechanically.

## TECHNICAL SPECIFICATIONS

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Base	polyurethane
Density (ISO 1183-1)	1,45 g/cm <sup>3</sup>
Application temperature	+5 °C to +40 °C
Surface curing time on dry substrate (MIT 33*)	8 minutes
Surface curing time on wet substrate + post-humidification (MIT 33*)	4 minutes
Initial setting time at 23 °C/50% r.h.	25 minutes
Final setting time at 23 °C/50% r.h.	24 hours
Hardening rate from the outside to the inside at 23 °C (MIT 32*)	2,5 mm in 24 hours
Operating temperature	-40 °C to +100 °C
Shear resistance (EN 205 D1; wood/wood)	≥ 10 N/mm <sup>2</sup>
Shear resistance (EN 205 D4; wood/wood)	≥ 4 N/mm <sup>2</sup>
Odour after curing	none

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

Packaging size	12x310 ml
Packaging	cartridge
Pallet	125 cardboards
Color	Ivory

## CONSUMPTION

150 g/m<sup>2</sup> is required for optimal bonding.

## STORAGE

Tack PU must be stored in a dry and cool environment between +5 °C and +30 °C, away from humidity, direct sunlight and heat sources. Under these conditions and in the original sealed packaging, it can be stored at least 12 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 21.10.2021.