

Soudabond 642 DUO

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Technical data

Basis		Polyurethane
Consistency		Paste
Curing system		Chemical curing
Potlife		Ca. 60 min
Application time		Ca. 45 min
Can be loaded after*		Ca. 8h
Hardness**	ISO 868	Ca. 65 Shore D
Density		A-component: ca. 1,31 g/ml B-component: ca. 1,33 g/ml Mixture: ca. 1,32 g/ml
Max. tension	ISO 37	$\geq 20,00 \text{ N/mm}^2$
Mixing ratio		A:B = 1:1
Shear strength**	DIN EN 1465	after 24h $> 4 \text{ N/mm}^2$ after 72h $> 10 \text{ N/mm}^2$ (AlMgSi-AlMgSi)
Tensile strength		Window corner connection: at $23^\circ\text{C} > 13 \text{ N/mm}^2$ at $80^\circ\text{C} > 8 \text{ N/mm}^2$
Consumption*		15 - 20 g per corner angle
Temperature resistance**		$-30^\circ\text{C} \rightarrow 100^\circ\text{C}$
Application temperature		$5^\circ\text{C} \rightarrow 35^\circ\text{C}$

* These values may vary depending on environmental factors such as temperature, moisture, and type of substrates. ** This information relates to fully cured product.

Product description

Soudabond 642 DUO is a 2-component construction adhesive based on polyurethane for bonding corner pieces in aluminum window profiles by post-injection (injection after assembly).

Properties

- Fast curing, independent of moisture
- Excellent adhesion on aluminum
- Very fast strength build-up.
- Very high final strength
- Free of solvents and water
- Foaming penetration action to fill bond cavities
- Does not shrink
- Weatherproof
- Universal applications

Applications

- For bonding angle pieces in extruded aluminium window profiles by means of post-injection (injection after assembly), but pre-injection (injection before assembly) is also possible.
- Bonding of various metals
- Firm bonding of the most varying material combinations such as wood, metal, plastic, stone, etc.

Packaging

Colour: beige, black

Packaging: 2 x 300 ml Side-by-Side koker, 2 x 300 ml foil bag

Shelf life

In unopened packaging in a dry and cool storage at temperatures between $+5^\circ\text{C}$ and $+25^\circ\text{C}$:

Remark: This technical data sheet replaces all previous versions. The directives contained in this documentation are the result of our experiments and of our experience and have been submitted in good faith. Because of the diversity of the materials and substrates and the great number of possible applications which are out of our control, we cannot accept any responsibility for the results obtained. Since the design, the quality of the substrate and processing conditions are beyond our control, no liability under this publication is accepted. In every case it is recommended to carry out preliminary experiments. Soudal reserves the right to modify products without prior notice.

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2 x 300 ml cartridge = 12 months

2 x 300 ml foil bag = 18 months

Substrates

Substrates: metals, aluminium, wood, stone, PVC, Not suitable for glass, PE, PP, PA, EPDM and Teflon.

Nature: rigid, clean, dry, free of dust and grease.

Surface preparation: No pretreatment required. We recommend a preliminary adhesion test on every surface.

Application method

Application method: First remove the screw cap and then the red valve. Place the tandem cartridge in a suitable hand or pneumatic 2K caulk gun and extrude the product, without static mixer, until both components come out of the cartridge (=leveling the pistons). Assemble thereafter the included static mixer on the tandem cartridge. This way an optimal mixing ratio is obtained much faster. Check the homogeneous mixing of the product when extruding (= the color stated on the cartridge). When using the pneumatic 2K caulk gun (Soudal PPA 300B, CSG II MP BCX/600), set the pressure to max. 7 bar (2.7 kN). Apply Soudabond 642 DUO, after assembly of the aluminium window frame, by means of post injection in the respective openings. The included static mixer can be cut to the desired diameter (= less pressure build-up) depending on the application. Soudabond 642 DUO can also be applied by pre-injection (injection before assembly). For other (metal-)bondings, apply Soudabond 642 DUO on one of the substrates to be bonded. Merge the materials within the processing time and clamp for at least 4 hours. Clamping the materials together, during curing, is required in order to achieve the highest possible final strength.

Cleaning: Uncured Soudabond 642 DUO can be removed from substrates and tools with Soudal Gun and Foam Cleaner. Cured Soudabond 642 DUO can only be removed mechanically.

Repair: With the same material.

Health- and Safety Recommendations

Consult label and material safety data sheet for more information. Always wear gloves and goggles. Take the usual labour hygiene into account.

Standards and certificates

- IFT-report 16-002204-PR01: Determination of the tensile strength of a bonded window angle corner.

Environmental clauses*Leed regulation:*

Soudabond 642 DUO conforms to the requirements of LEED. Low –Emitting Materials: Adhesives and Sealants. SCAQMD rule 1168. Complies with USGBC LEED 2009 Credit 4.1: Low-Emitting Materials – Adhesives & Sealants concerning the VOC-content.

Liability

The content of this technical data sheet is the result of tests, monitoring and experience. It is general in nature and does not constitute any liability. It is the responsibility of the user to determine by his own tests whether the product is suitable for the application.

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