

Soudabond 680

Product description

Soudabond 680 is a high quality, neutral, one-component adhesive based on SMX Polymer. Soudabond 680 has excellent primerless adhesion to ABS.

Properties

- Excellent primerless adhesion on ABS and most other materials
- Good mechanical characteristics
- Combines high end strength with certain rigidity
- High initial tack
- Fast build-up of end strength
- No bubble formation within sealant in high temperature and humidity applications
- Good weather and UV resistance
- Free of isocyanates, solvents, halogens and acids
- Can be painted with water based systems, industrial varnishes and coatings

Applications

- Suitable for the bonding of ABS parts
- For bonding of for instance (imitation) leather, textile, glass, metal, textile, ABS, Plexiglas and many synthetic materials, both hard and soft
- Elastic structural bonding applications where a tough and rigid bond is required.
- Elastic structural bonding in automotive applications: buses, trains, trucks, caravans or trailers, ...

Technical data

Base	SMX Hybrid Polymer	
Consistency	Stable paste	
Curing system	Moisture curing	
Skin formation	ca. 20-30 minutes	
Curing speed	3 mm/24h	
Density	1,40 g/ml	
Elasticity modulus	ISO 37	2,30 N/mm ²
Elongation at break	ISO 37	> 300 %
Maximum tension	ISO 37	4,20 N/mm ²
Hardness	60 ± 5 Shore A	
Shear strength	> 2 MPa (Measured on Stapron®, 2 mm paste thickness and 10 mm/min test speed)	
Application temperature	+5°C → +35°C	
Temperature resistance	-40°C → +90°C	

Footnote: Skinning time and curing speed may vary depending on environmental factors such as temperature, moisture, and type of substrates.

Substrates

- Substrate condition
The surface must be rigid, clean, dry, free of dust and grease.

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- **Substrate preparation**
For optimal adhesion the use of Soudal Surface Activator is recommended. While producing plastics very often releasing agents, processing aids and other protective agents (like protection foil) are used. These should be removed prior to bonding or sealing.
- **Substrate types**
Soudabond 680 has a good adhesion to following substrates: stainless steel, AlMgSi1, electrolytic galvanized steel, galvanized steel, AlMg3, steel ST1403, polystyrene, polycarbonate, PVC, ABS, polyamide, PMMA, fiberglass reinforced epoxy, polyester. Soudabond 680 has no good adhesion or is not suitable for PE, PP, PTFE (Teflon®), bituminous substrates, copper or copper containing materials such as bronze and brass. We recommend a preliminary adhesion and compatibility test on every surface.

Application method

- **Application method**
Apply Soudabond 680 with a manual- or pneumatic caulking gun.
- **Cleaning method**
Clean with Soudal Surface Cleaner or with Soudal Swipex Wipes, immediately after use.
- **Finishing method**
Finish with a soapy solution or Finishing Solution before skinning.
- **Repair method**
Repair with the same material.

Health- and Safety Recommendations

Take the usual labour hygiene into account. Consult the packaging label and safety data sheet for more information.

Packaging/Logistics

Colour: Please consult the product catalogue, the Soudal website or a Soudal representative.

Packaging: Please consult the product catalogue, the Soudal website or a Soudal representative.

Shelf life: 12 months in unopened packaging in a cool and dry storage place at temperatures between +5°C and +25°C

Joint dimensions

- The optimal bond thickness for this product is at least 2 mm for the elastic properties to come to full justice.

Remarks

- Soudabond 680 is paintable with most waterbased paints, however due to the large number of paints and varnishes available we strongly suggest a compatibility test before application.
- The drying time of alkyd resin based paints may increase.
- Soudabond 680 can be applied to a wide variety of substrates. Due to the fact that specific substrates such as plastics, like polycarbonate, etc., may differ from manufacturer to manufacturer, we recommend a preliminary compatibility test.
- Soudabond 680 has a good UV resistance but can discolour under extreme conditions or after long UV exposure.
- Soudabond 680 can not be used as a glazing sealant.
- The use on plastics such as PMMA (e.g. Plexi® glass) or polycarbonate (e.g. Makrolon® or Lexan®) in stress loaded applications can give rise to stress cracking and crazing within the substrate. The use of Soudabond 680 is not recommended in these applications.

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. It is general in nature and does not constitute any liability. 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. It is the responsibility of the user to determine by his own tests whether the product is suitable for the application. In every case it is recommended to carry out preliminary experiments. The manufacturer reserves the right to modify products without prior notice.