

Soudaseal 645

Revision:22/04/2019

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Technical data

Basis	SMX Hybrid Polymer
Consistency	Stable paste
Curing system	Moisture curing
Skin formation* (23°C/50% R.H.)	Ca. 22 min
Curing speed * (23°C/50% R.H.)	3 mm/24h
Hardness**	50 ± 5 Shore A
Density**	1,68 g/ml
Maximum allowed distortion	± 20 %
Max. tension (ISO 37)**	1,77 N/mm ²
Elasticity modulus 100% (ISO 37)**	1,33 N/mm ²
Elongation at break (ISO 37)**	> 200 %
Temperature resistance**	-40 °C → 90°C *Short Term upto 120°C
Application temperature	5 °C → 35 °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

Soudaseal 645 is an elastic SMX-polymer adhesive for bonding and sealing of body elements.

Properties

- Good adhesion on nearly all substrates.
- Easy to tool, extrude (even at low temperatures) and finish in all weather conditions.
- Phthalate-free
- Tin-free
- Does not shrink
- Stays elastic after curing.
- No odour
- No bubble formation within sealant in high temperature and humidity applications.
- Primerless application on many substrates (except where water pressure may occur)
- Solvent, halogen, acid and isocyanate free.

Applications

- Supple bonding and sealing in vibrating constructions in car bodies, caravans and containers.
- Strong elastic bonding in vibrating constructions.

- Flexible connections in automotive applications.

Packaging

Colour: white, other colors on request

Packaging: 600 ml sausage

Shelf life

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

Chemical resistance

Good resistance to (salt)water, aliphatic solvents, hydrocarbons, ketones, esters, alcohols, diluted mineral acids and alkalis. Poor resistance to aromatic solvents, concentrated acids and chlorinated hydrocarbons.

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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Substrates

Substrates: many porous and non-porous substrates, metals, aluminium, wood, PVC, ...
Not suitable for PE, PP, PTFE (eg Teflon®), bituminous substrates, copper or copper-containing materials such as bronze and brass.
We recommend a preliminary adhesion and compatibility test on every surface.

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

Surface preparation: Prepare non-porous surfaces with Soudal primer or cleaner (see Technical Data Sheet). Porous surfaces in water loaded applications should be primed with Primer 150.

Application method

Application method: With manual- or pneumatic caulking gun.

Cleaning: Clean with White Spirit or Soudal Surface Cleaner immediately after use (before curing).

Finishing: With a soapy solution or Soudal Finishing Solution before skinning.

Repair: With the same material

Health- and Safety Recommendations

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

Remarks

- When applying, make sure not to spill any sealant on the surface of materials. Taping the surface around the joint can prevent this.
- A total absence of UV can cause a color change of the sealant.
- Soudaseal 645 can discolour under the influence of high UV stress and in dark spaces.
- Discoloration due to chemicals, high temperatures, UV-radiation may occur. A change in color does not affect the technical properties of the product.
- When using different reactive joint sealants, the first joint sealant must be completely hardened before the next one is applied.
- Do not use in applications where continuous water immersion is possible.
- Contact with bitumen, tar or other plasticizer releasing materials such as EPDM, neoprene, butyl, etc. is to be avoided since it can give rise to discolouration and loss of adhesion.

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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