

Soudaseal SMX 55

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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. 20 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)**	Ca. 1,75 N/mm ²
Elasticity modulus 100% (ISO 37)**	Ca. 1,30 N/mm ²
Elongation at break (ISO 37)**	> 200 %
Temperature resistance**	-40 °C → 90 °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 SMX 55 is a high quality, neutral, elastic, 1-component adhesive sealant based on SMX-Polymer with a very high initial tack.

Properties

- High initial tack reducing the need for initial support.
- Good extrudability
- high shear strength after full cure (no primer)
- In and outdoor use
- Stays elastic after curing and very sustainable
- No odour.
- Can be painted with water based systems
- Does not contain isocyanates and no silicones
- Good adhesion on slightly moist substrates

Applications

- Bonding of all types of building materials onto all porous and non porous surfaces.
- Elastic bonding of panels, profiles and other pieces on the most common substrates (wood, MDF, chipboard, etc).
- Strong elastic bonding in vibrating constructions.

Packaging

Colour: black, other colors on request
Packaging: 600 ml sausage, other packaging on request

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.

Substrates

Substrates: all usual building substrates, aluminium, treated wood, ...

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

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

Soudaseal SMX 55 is has been tested on

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following metal surfaces: AlCuMg1, AlMg3, stainless steel, electro-galvanized steel, steel ST1403, hot dip galvanized steel. Soudaseal SMX 55 also has a good adhesion on plastics: polycarbonate (Makrolon®), polyamide, fiberglass reinforced epoxy, polyester. 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. For optimum adhesion the use of Surface Activator is recommended. NOTICE: bonding plastics like PMMA (e.g. Plexi® glass), polycarbonate (e.g. Makrolon® or Lexan®) in stress loaded applications can give rise to stress cracking and crazing in these substrates. The use of Soudaseal SMX 55 is not recommended in these applications. 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.

Application method

Application method: With manual- or pneumatic caulking gun.

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

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

- Soudaseal SMX 55 may be overpainted with water based 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.

- Soudaseal SMX 55 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 preliminary compatibility test.
- Soudaseal SMX 55 can not be used as a glazing sealant.
- When applying, make sure that the surface of the materials is not smudged with sealant.
- A total absence of UV can cause a color change of the sealant.
- Soudaseal SMX 55 can discolour under extreme conditions or after very long UV exposure.
- Soudaseal SMX 55 cannot be used on porous materials such as natural stone because of the risk of staining.
- When using different reactive joint sealants, the first joint sealant must be completely hardened before the next one is applied.
- Not suitable for bonding aquariums.
- Do not use in applications where continuous water immersion is possible.
- Discoloration due to chemicals, high temperatures, UV-radiation may occur. A change in color does not affect the technical properties of the product.
- 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 discoloration and loss of adhesion.
- Soudaseal SMX 55 cannot be used on natural stone.

Environmental clauses

Lead regulation:

Soudaseal SMX 55 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.

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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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