

## Fix ALL Crystal

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### Technical data

Basis	SMX Hybrid Polymer
Consistency	Stable paste
Curing system	Moisture curing
Skin formation* (20°C / 65% R.H.)	Ca. 10 min
Curing speed * (20°C / 65% R.H.)	2 mm/24h → 3 mm/24h
Hardness	38 ± 5 Shore A
Density	1,04 g/ml
Elastic recovery (ISO 7389)	> 75 %
Maximum allowed distortion	± 20 %
Max. tension (DIN 53504)	2,40 N/mm <sup>2</sup>
Elasticity modulus 100% (DIN 53504)	0,80 N/mm <sup>2</sup>
Elongation at break (DIN 53504)	300 %
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.

### Product description

Fix ALL Crystal is a high quality, crystal clear, neutral, elastic, 1-component adhesive based on SMX-Polymer.

### Properties

- crystal clear formulation
- Excellent adhesion on nearly all surfaces, even if slightly moist.
- Very good mechanical characteristics.
- Impervious to mould, contains ZnP (biocide with fungicidal action)
- Suitable for sanitary applications.
- Good extrudability even at low temperatures
- Free of isocyanates, solvents, halogens and acids
- Can be painted with all water based paints and many other systems (to be tested)
- Permanently elastic after curing

### Applications

- All common bonding and sealing applications, both in and outdoor.
- Transparent and elastic bonding in construction and building applications.

- Invisible bonding of glass and other transparent materials in indoor applications.
- Joints in bathrooms and kitchens.

### Packaging

*Colour:* transparent

*Packaging:* 290 ml cartridge, 80 ml tube

### 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:* all usual building substrates, glass, treated wood, PVC, plastics, metals, stone, concrete, ...

*Nature:* clean, free of dust and grease.

*Surface preparation:* Porous surfaces in water loaded applications should be primed with Primer 150. All smooth surfaces can be treated with Soudal Surface Activator.

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. There is no adhesion on PE, PP, PTFE (Teflon®) and bituminous substrates. 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 Fix ALL Crystal is not recommended in these applications.

### Joint dimensions

*Min. width for bonding:* 1 mm

*Min. width for joints:* 5 mm

*Max. width for bonding:* 3 mm

*Max. width for joints:* 10 mm

*Min. depth for joints:* 5 mm

### Application method

*Application method:* With manual- or pneumatic caulking gun.

*Cleaning:* With Fix ALL Cleaner immediately after use. Cured Fix ALL Crystal can only be removed mechanically.

*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 for more information.

### Remarks

- Fix ALL Crystal is paintable with 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.
- Fix ALL Crystal 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.
- Fix ALL Crystal is not suitable for expansion joints.
- Do not use in applications where continuous water immersion is possible.
- Fix ALL Crystal has a good UV resistance but can discolour under extreme conditions or after very long UV exposure.
- Fix ALL Crystal can not be used as a glazing sealant.
- Not suitable for bonding aquariums.
- Fix ALL Crystal cannot be used on natural stone. Because the adhesion surface will discolour under influence of the sealant (looks wet) and because this is visible through the crystal clear sealant it seems like staining has occurred.
- The sanitary formula should not replace regular cleaning of the joint. Excessive contamination, deposits or soap remainings will stimulate the development of fungi.
- A total absence of UV can cause a color change of the sealant.
- Discoloration due to chemicals, high temperatures, UV-radiation may occur. A change in color does not affect the technical properties of the product.

### Standards and certificates

- Tested and in accordance with FDA regulation code CFR 21 paragr. 177.2600 (e) for repeated use in contact with aqueous foods.

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### Environmental clauses

#### *Leed regulation:*

Fix ALL Crystal 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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