Fix ALL Crystal

Technical data

Basis	SMX Hybrid Polymer
Consistency	Stable paste
Curing system	Moisture curing
Skin formation* (23°C/50% R.H.)	Ca. 4 min
Curing speed * (23°C/50% R.H.)	2 mm/24h → 3 mm/24h
Hardness**	38 ± 5 Shore A
Density	Ca. 1,05 g/ml
Elastic recovery (ISO 7389)**	> 75 %
Maximum allowed distortion	± 20 %
Max. tension (ISO 37)**	Ca. 1,80 N/mm²
Elasticity modulus 100% (ISO 37)**	Ca. 0,60 N/mm²
Elongation at break (ISO 37)**	Ca. 350 %
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

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 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 water based systems
- Permanently elastic after curing

Applications

- All common bonding applications, both in and outdoor.
- Sealing joints indoors.
- 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, 600 ml foil bag

Shelf life

15 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, glass, treated wood, PVC, plastics, metals, stone, concrete, ...
Nature: rigid, clean, dry or slightly moist, free of dust and grease.

Remark: This technical data sheet replaces al 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.

Surface preparation: Porous surfaces should be primed with Primer 150. Prepare non-porous surfaces with a Soudal activator or cleaner (see Technical Data Sheet).
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.
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. 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.

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 a manual, pneumatic or accu caulking gun.
Cleaning: Clean with Soudal Surface Cleaner or with Soudal Swipex, 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 and material safety data sheet for more information.
Dangerous. Respect the precautions for use.

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 appication.
- 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 compatibilty test.
- Fix ALL Crystal is not suitable for expansion joints.
- Do not use in applications where continuous water immersion is possible.
- Fix ALL Crystal 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.
- The sanitary formula should not replace regular cleaning of the joint. Excessive contamination, deposits or soap remainigs 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.
- 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.
- When using different reactive joint sealants, the first joint sealant must be completely hardened before the next one is applied.

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Standards and certificates

- Declaration of compliance ISEGA - Tested for use in foodstuffs-related area.

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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