SOUDAL

Technical Data Sheet

T-Rex Power Crystal

Technical Data:

Base	SMX Hybrid Polymer	
Consistency	Stable paste	
Curing system	Moisture curing	
Skin formation*	4 min	@ 75ºF (24°C) & 50% relative humidity
Curing speed *	2 mm/24h → 3 mm/24h	@ 75ºF (24°C)& 50% relative humidity
Hardness**	38 ± 5 Shore A	ASTM C 661
Density	1.05 g/mL	
Elastic recovery**	> 75 %	ISO 37
Maximum allowed distortion	± 25 %	ASTM C 719
Tensile Strength	348 psi	ASTM D 412
Modulus	116 psi	ASTM D 412
Elongation	300 %	ASTM D 412
Temperature resistance**	-40°F (-40°C) → 194°F (90°C)	
Application temperature	41°F (5°C) → 95°F (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:
T-Rex Power 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 mold, 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 water based systems
- 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:
Color: transparent
Packaging: 9.8 fl oz. (290 mL) cartridge

Shelf Life:
15 months in unopened packaging in a cool and dry storage place at temperatures between 41°F (5°C) and 77°F (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.
Surface preparation: Porous surfaces should be primed with Primer 150. Prepare nonporous surfaces with a Soudal activator or cleaner (see Technical Data Sheet).

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T-Rex Power Crystal

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 T-Rex Power Crystal is not recommended in these applications. Not suitable for PE, PP, PTFE (eg Teflon®), bituminous substrates, copper or coppercontaining materials such as bronze and brass. We recommend a preliminary adhesion and compatibility test on every surface.

Joint dimensions
Min. width for bonding: 1/32” (1 mm)
Min. width for joints: 3/16” (5 mm)
Max. width for bonding: 1/8” (3 mm)
Max. width for joints: 3/8” (10 mm)
Min. depth for joints: 3/16” (5 mm)

Application method
Application method: With manual- or pneumatic caulking gun.
Cleaning: Clean with Soudal Swipex immediately after use Cured T-Rex Power Crystal can only be removed mechanically. *Finishing:* With a soapy solution before skinning.
Repair: With the same material.

Health- and Safety Recommendations
Take the usual labor hygiene into account. Consult label and material safety data sheet for more information.

Remarks
- T-Rex Power 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.
- T-Rex Power 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.
- T-Rex Power Crystal is not suitable for expansion joints.
- Do not use in applications where continuous water immersion is possible.
- Crystal has a good UV resistance but can discolor under extreme conditions or after very long UV exposure.
- Crystal can not be used as a glazing sealant.
- Not suitable for bonding aquariums.
- Crystal cannot be used on natural stone.
- 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.
- 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.

Standards and certificates
ASTM C 920, Type S, Grade NS, Class 25, Use T, NT, M, A, G* and O**, Federal Specification TTS 00230C, Type II, Class A, USDA approved

Environmental clauses
Leed regulation:
T-Rex Power 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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