

3 April 2024

T-REX TURBO

Technical Data

Basis	SMX® Hybrid Polymer
Consistency	Stable paste
Curing system	Moisture curing
Skin formation* (23°C/50% R.H.)	Ca. 5 min
Hand tight	After 20 min (after pressing firmly)
Hardness**	Ca. 65 ± 5 Shore A
Density	Ca. 1.52 g/mL
Elastic recovery (ISO 7389)**	> 75 %
Maximum allowed distortion (ISO 11600)	± 20 %
Max. tension (ISO 37)**	Ca. 3.80 N/mm ² (MPa)
Elasticity modulus 100% (ISO 37)**	Ca. 3.00 N/mm ² (MPa)
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

T-Rex Turbo is an adhesive-sealant with very fast strength build-up, ideal for applications where super-fast bonding is required. Develops a strong bond on porous surfaces in thin layer after only 20 minutes, it will be fully set after 3 hours. Once cured it forms a strong and elastic waterproof seal.

It is based on the unique SMX® Hybrid Polymer technology developed by Soudal.

Properties

- Quickly manipulable and very fast build-up of strength with thin adhesive layer and on porous substrates.
- Very high final strength
- Good extrudability
- Good adhesion to most common substrates, even on damp substrates
- Permanently elastic after curing
- Can be painted with water based systems
- Good weather and UV resistance

Applications

- Bonding in the building, construction and metal industry.

- Elastic bonding of objects, panels, profiles and other pieces on the most common substrates (wood, MDF, chipboard, etc).

Packaging

Colour: white

Packaging: 290 mL cartridge, 125 mL squeeze tube

Shelf life

15 months in original, unopened packaging in a cool and dry storage place with temperature 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, brick, concrete, metals, treated timber, PVC, plastics, ...

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

Surface preparation: T-Rex Turbo has a good adhesion to most substrates. However, for optimal adhesion and in critical applications, such as joints exposed to

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extreme weather conditions, high- or water- loaded joints, we recommend to follow a pretreatment procedure. Prepare non-porous surfaces with a Soudal **Surface Activator** or cleaner (see Technical Data Sheet). Porous surfaces should be primed with Soudal **Primer 150**.

T-Rex Turbo has been tested on the following metal surfaces: steel, AlMgSi1, electrolytic galvanised steel, AlCuMg1, flame galvanised steel, AlMg3 and steel ST1403. T-Rex Turbo also has a good adhesion on plastics: polystyrene, polycarbonate (Makrolon®), PVC, ABS, polyamide, PMMA, 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 T-Rex Turbo 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

Ensure correct joint dimension and preparation, consult the technical bulletin "Joint Preparation & Joint Dimensions" on our website.

The optimal bond thickness for this product is at least 2 mm for the elastic properties to come to full justice.

Application method

Refer to the current Technical Data Sheet on our website prior to use.

Apply the product with high thrust-ratio caulking gun in uniform bead strips every 15 cm on one of the substrates. Always apply bead strip on the panel corners and edges. Do not apply in closed

circumferences (non-porous surface). Bond the substrate and tamp with a rubber hammer. If necessary support the bonded materials.

For absorbent and porous substrates with thin adhesive layer, T-Rex Turbo will be hand tight within 20 minutes and can be loaded after about 3 hours.

For thicker adhesive layer and non-porous substrates, curing time is extended.

Application method: With manual- or pneumatic caulking gun.

Cleaning: Clean with Soudal Surface Cleaner or with Soudal **Swipex**, immediately after use. Cured T-Rex Turbo 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. Use only in well-ventilated areas.

Remarks

- T-Rex Turbo 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.
- T-Rex Turbo cannot be used as a glazing sealant.
- T-Rex Turbo can be used for bonding of natural stone, but it cannot be used as a joint sealant on this type of surface. T-Rex Turbo can therefore only be used on the bottom of natural stone tiles.
- When applying, make sure that the surface of the materials is not smudged with sealant.
- A total absence of UV can cause a colour change of the sealant.
- 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.

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- Do not use in applications where continuous water immersion is possible.
- Discoloration due to chemicals, high temperatures, UV-radiation may occur. A change in colour 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.

Environmental clauses

Leed regulation:

T-Rex Power Fast Grab 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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