SOUDAL

Technical Data Sheet

T-REX POWER SEAL AND BOND

Technical Data:

Base	Silyl-terminated polymer	
Sag	No sag in vertical displ. @120ºF	ASTM C 639
Curing system	Moisture Cure	
Skin Formation (*)	5 minutes	@ 75ºF & 50% relative humidity
Tack-free time (*)	20 minutes	ASTM C 679
Curing time (*)	24-48 hrs, 1/4” diameter bead	@ 75ºF & 50% relative humidity
Hardness – Shore A	55 +/- 5	ASTM C 661
Tensile Yield	400 psi	ASTM D 412
Elongation	300%	ASTM D 412
Movement capability	+/- 25%	ASTM C 719
Stain and color change	Passes	ASTM C 510 (mortar)
Artificial weathering	No Cracking	ASTM C 793
Service temperature range	-40°F to +200°F	
Application temperature range	-35°F to +140°F	
Shelf life	12 months	Stored between 41ºF & 77ºF
VOC	< 2 % - 20 g/L	EPA method 24

(*) these values may vary depending on environmental factors such as temperature, moisture, and type of substrates.Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

Product:
T-Rex Power Seal and Bond is an SMX® adhesive/sealant with high initial tack.

Characteristics:
- excellent adhesion on porous and non porous substrates
- immediate high grab strength on nearly all surfaces
- high performance mechanical properties
- flexible elastic rubber - movement accommodation up to +/-25%
- high green strength, quick build-up of end strength, high shear strength after full cure
- no bubble formation within sealant even in high temperature and humidity applications
- very easy to tool and finish
- color stable and UV resistant
- ecological advantages - free of isocyanates, solvents, halogens and acids
- minimal health and safety considerations
- can be painted with water based paints and many other systems (to be tested)
- good extrudability even at low temperatures
- excellent weather resistance in all climates
- primerless adhesion on many different substrates (except where water pressure may occur)
- almost odorless

Applications:
- can be used for mirror installations with additional mechanical support
- sealing and bonding in building and construction industry and metal working industry
- structural elastic bonding
- structural bonding applications in the automotive industry (cars, coaches, caravans, trains)
- elastic bonding of panels, profiles and other pieces on the most common substrates

Colors:
Various

Packaging:
10.1 fl. oz. cartridge (20oz sausages upon request)

Shelf life:
12 months in unopened packaging in a cool and dry storage place at temperatures between 41°F and 77°F.

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Adhesion:
T-Rex Power Seal and Bond has an excellent adhesion on almost all substrates. T-Rex Power Seal and Bond has been tested on the following surfaces: steel, AlMgSi1, brass, electrolytic galvanized steel, AlCuMg1, flame galvanized steel, AlMg3, steel ST1403 and Kynar 500. Plastics that were tested include: polystyrene, polycarbonate (Makrolon®), PVC, polyamide, glasfiber reinforced epoxy and polyester (GRP). 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. For optimum adhesion the use of Surface Activator is recommended.

NOTICE: bonding plastics like PMMA (ie Plexi® glass) and polycarbonate (ie Makrolon® or Lexan®) in stress loaded applications can give rise to stress cracking and crazing in these substrates. The use of T-Rex Power Seal and Bond is not recommended in these applications. There is no adhesion on PE, PP, PTFE (Teflon®), silicones and bituminous substrates.

Substrates:
Surface Preparation: clean, dry, free of dust and grease
- It is expected that the product will adhere and perform in uncontaminated joints with most common construction substrates, without the use of a primer.
- Porous surfaces in water loaded applications should be primed with Primer 150.
- Surface Activator may be used to pretreat non-porous surfaces.
- We always recommend preliminary compatibility tests pervious to application.

Resistance to chemical agents:
Good resistance to water, aliphatic solvents, mineral oils, grease, diluted inorganic acids and alkalis. Poor resistance to aromatic solvents, concentrated acids, chlorinated hydrocarbons.

Joint dimensions:
Minimal Width: 1/4”
Maximum Width: 1 3/16”
Minimum Depth: 1/5”
Recommendation: width = 2 x depth

Bonding Layer:
We recommend a bonding layer of at least 5/64” to achieve a bond with maximum elastic properties.

Application:
Method: Manual- or pneumatic caulking gun.
Application temperature: -35°F to +140°F.
Cleaning: with IPA immediately after use and before curing. *Repair with:* T-Rex Power Seal and Bond.

Remarks:
- Pre-testing for adhesion is intended to eliminate potential problems. This testing will aid in determining the proper surface preparation method.
- May be painted, 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.
- 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 tests.
- Porous surfaces in water loaded applications should be primed with Primer 150.
- Lower temperatures and humidity will extend curing time.
- Contact with plasticizer containing plastics (e.g. flexible PVC, butyl rubber, EPDM,…) can lead to incompatibilities, such as discoloration or loss of adhesion. We recommend a preliminary compatibility test.
- We recommend a preliminary adhesion test on every surface.

Meets:
ASTM C 920, Type S, Grade NS, Class 25, Use T, NT, M, A, G* and O**, Federal Specification TT-S-00230C, Type II, Class A.

* T-Rex Power Seal and Bond is not recommended to be used as glazing sealant.

** See recommended substrates.

T-REX POWER SEAL AND BOND

Health- and Safety Recommendation:
KEEP OUT OF REACH OF CHILDREN. Avoid skin and eye contact. On contact, uncured sealant could cause irritation to skin and eyes. In case of eye contact, flush eyes with warm water for 15 minutes, call a physician. For skin contact, remove sealant with a paper towel. If swallowed, do not induce vomiting, call a physician. T-Rex Power Seal and Bond is manufactured for professional use only. Refer to Material Safety Data Sheet (MSDS) for further information.

Limited Warranty:
SOUDAL warrants product to be of good quality and will replace or, at our election, refund the purchase price of any products proved to be defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, SOUDAL MAKES NO WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS, and SOUDAL shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing one (1) year from the date of shipment. No claim will be considered without such written notice or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith.