TYTAN PROFESSIONAL Aquarium & Glazing Silicone

Aquarium and glazing silicone is a one-component, fast curing sealant with an acidic (acetate) curing system. It is designed for bonding and sealing smooth surfaces such as glass, glaze, aluminium, laminated and varnished surfaces, plastics and wood. It forms an elastic, non-shrinking and water-resistant joint. It does not discolour, shrink or crack over time. It is characterised by excellent resistance to ageing under the influence of changing weather conditions and UV radiation.

BENEFITS

- excellent mechanical properties
- good adhesion to many smooth building materials
- high resistance to UV radiation
- fast curing rate
- low shrinkage
- safe for fish, reptiles and amphibians

RECOMMENDED USES

- sealing vertical dilatation joints
- sealing glass in display cabinets, marks, cable ducts
- sealing and bonding aquariums and terrariums
- sealing of refrigeration, ventilation, heating and air conditioning systems
- protection of polyurethane foams against UV radiation

Selena FM S.A.
ul. Legnicka 48A, 54-202 Wrocław, Poland
tel. +48 71 78 38 290, e-mail: office@selena.com, www.selena.com

NORMS / ATESTS / CERTIFICATES

The product meets requirements of:

- EN 15651-2:2012 G-CC 20LM
- ISO 11600 : 2004, F&G, 20LM

Product has a Hygienic Certificate issued by the National Institute of Hygiene. Number of ceriticate:

- HK/B/0387/01/2013

Additional information

- Fire reaction: E

TECHNICAL DATA

Uncured - tested at 23°C and 50% relative humidity	Value
Density (ISO 2811-1) [g/ml]	1,01 - 1,03
Skin formation time [min]	5 - 30
Tack Free [min]	5 - 15
Curing rate [mm/24h]	2 - 3
Flow from vertical surfaces [+50°C] (ISO 7390) [mm]	0 - 3
Cured - tested after 4 weeks at 23°C and 50% relative humidity	**Value**
Shrinkage (ISO 10563) [%]	1 - 5
Module at 100% elongation (ISO 8339) [MPa]	0,4 - 0,5
Movement accommodation (ISO 9047) [%]	20
Elongation at break (ISO 8339) [%]	106 - 120
Elastic recovery (ISO 7389) [%]	95 - 99
Shore A hardness (ISO 868)	22 - 26
Temperature resistance [°C]	-50 - +180 (+205)
Adhesion to surface	**Value**

Selena FM S.A.
ul. Legnicka 48A, 54-202 Wrocław, Poland
tel. +48 71 78 38 290, e-mail: office@selena.com, www.selena.com

Aluminium	+
Cast iron	+/-
Stainless steel	+
Galvanized sheet	+/-
Ceramic tile	+
PS (polystyrene)	+
Glass	+
Clinker tile	+
Raw wood (pine)	+
Hard PVC (polyvinyl chloride)	+

Colour	Value
White	RAL 9003
Transparent	+
Black	RAL 9005
Brown	+
Grey	+
Beige	+

Conditions of application	Value
Surface temperature [°C]	5 - 40
Container temperature [°C]	0 - 25
Application temperature [°C]	5 - 40

METHOD OF USE

Prior to application, read safety instruction presented in MSDS.

Surface preparation

- Bonding surfaces must be clean, dry (not frosted) free of dust, rust, old loose material, oil, grease, paint and other dirt which reduces the adhesion of the sealant.

Selena FM S.A.
ul. Legnicka 48A, 54-202 Wrocław, Poland
tel. +48 71 78 38 290, e-mail: office@selena.com, www.selena.com

- Surfaces best degrease with acetone or ethanol (glass, glaze, metal) or detergent (synthetic materials).
- To avoid dirtiness around the gap and to maintain equal line use adhesive tapes which should be removed immediately after finishing sealing.
- Sealant does not require using primer on most surfaces but on some specific surfaces may have to use it to improve adhesion.
- Joint width should be as to be able to carry movement in range calculated for sealant in question (movement accommodation).
- The sealant bead should not be wider than 25 mm and the minimum joint width should be 6 mm to allow in the construction field proper application and tooling of sealant. The ideal ratio of joint width : depth is 2 : 1.
- For proper design deep joints should be filled with back-up rod.
- In movable joints tripartite sealant adhesion to the surface should be avoided because it can cause its damage. For this purpose if depth of the slots does not allow introduction of polyurethane foam, use dilatation tape or back-up rod. Using foam or tape causes bipartite sealant adhesion and allows proper work with the joint.
- If joints are too shallow to allow backing material to be used, we recommend use of adhesive tape. This acts as a back-up rod to prevent seal in forming of three-sided adhesion.
- While bonding of the aquarium proper parameters of the joint should be kept. Joint width should be at least 2 mm and not wider than 10 mm. Joint depth determines width of the glass.

Product preparation

- Prior to application, the product should be conditioned at room temperature.

Application

- Cut off the top of the threaded adapter. Screw the nozzle tip on and cut off at a 45° angle, with the diameter equal to the gap width.
- Cut off the top of the foil. Screw the nozzle tip on and cut off at a 45° angle, with the diameter equal to the gap width.
- Squeeze sealant by mechanical or pneumatic gun.
- Treatment make at the time of workability given in the technical data table.
- Applied sealant should be smoothed immediately with a spatula soaked in soapy water for best result.
- Remove masking tape before skin will form.
- Joint should be allowed to fully cure.
- For bonding and sealing aquariums (marine and freshwater) up to a height of 60 cm.

Works after completion of application

- Uncured product should be removed from hands, tools and dirty surfaces with paper towel.
- After curing, remove from hands with water and soap; from tools remove mechanically. or using agent for removing silicones - Silicone Remover.

Selena FM S.A.
ul. Legnicka 48A, 54-202 Wrocław, Poland
tel. +48 71 78 38 290, e-mail: office@selena.com, www.selena.com

- DO NOT WASH HANDS WITH SOLVENTS.

Remarks / restriction

- Do not apply on wet surfaces.
- Due to the acetic acid released during curing, acid silicone is not recommended for use on calcareous substrates such as concrete, plaster, brick.
- Sealant is not intended for sealing joints of natural stone, such as granite, sandstone, marble, etc.
- Sealant should not be used on bituminous surfaces, partially vulcanized rubber, chloroprene or other construction materials that bleed oils, plasticizers or solvents.
- Do not apply on sensitive metal surfaces for example copper and its alloys and silver steel of mirrors.
- Sealant is not recommended for joints that are permanently under water, because it can cause physical changes.
- Do not use in totally confined spaces where it is not exposed to atmospheric moisture, because the sealant requires atmospheric moisture for cure.
- Sealant is not intended for applications involving structural glazing.
- Silicone should not be painted.
- It is not suitable for direct contact with food and medical uses. Sealant was not duly tested and it is not suitable for medical and pharmaceutical applications.
- Do not apply on PE, PP - no adhesion.
- Not suitable for bonding mirrors.

ADDITIONAL INFORMATION

All given parameters are based on laboratory tests compliant with internal manufacturer's standards and strongly depend on product hardening conditions (c.a., ambient, surface temperature, quality of used equipment and skills of person applying the product).

TRANSPORT / STORAGE

Warranted shelf life is 24 months from the manufacturing date when stored in unopened, original package at temperature from +0 °C to +25 °C in a dry place protected from freezing.

Product can be transported at low temperatures up to -30 °C for up to 3 weeks, before using the product should be conditioned for 24 hours at +23 °C.

Precautions should be taken when the product after thawing out is frosted again - is resistant to 3 cycles of freezing/thawing out.

Selena FM S.A.
ul. Legnicka 48A, 54-202 Wrocław, Poland
tel. +48 71 78 38 290, e-mail: office@selena.com, www.selena.com

CATALOGUE DATA

Nominal capacity / volume / size	Colour	Number of pieces per collective package	Index	EAN Code
280 ml	black	12	10041679	5902120176823
280 ml	brown	12	10041684	5902120176762
280 ml	grey	12	10041683	5902120176786
280 ml	transparent	12	10047935	5902120195367
280 ml	transparent	12	10045659	5902120174577
280 ml	transparent	12	10041678	5902120176809
280 ml	white	12	10041680	5902120176748
310 ml	transparent	12	10045748	5902120189618
310 ml	white	12	10046173	5902120191864
600 ml	transparent	6	10022324	5903518004100

SAFETY AND HEALTH PRECAUTIONS

For detailed information find Material Safety Data Sheet available at producer upon request.

All written or oral information, recommendations and instructions are given according to our best knowledge, tests and experience, in good faith and in compliance with manufacturer's principles. Each user of this material will make sure in every possible way, including verification of the final product in proper conditions, about suitability of the supplied materials for their intended purposes. The manufacturer is not liable for any losses incurred due to inaccurate or erroneous application of the manufacturer's materials.

Selena FM S.A.
ul. Legnicka 48A, 54-202 Wrocław, Poland
tel. +48 71 78 38 290, e-mail: office@selena.com, www.selena.com