

Description

BLUESIL SLT 10T is a one-component, odourless, ready-to-use neutral silicone elastomer (alcoxy type) intended to produce sealing and bonding joints.

It cures at room temperature in the presence of air moisture to give a flexible and strong seal with low modulus of elasticity.

BLUESIL SLT 10T adheres without a primer on virtually all surfaces found in building construction and accepts movements of 25% in continuous service within a wide range of temperatures.

Examples of applications

BLUESIL SLT 10T is specially intended to produce sealing and bonding joints in the construction and glazing industries. It provides an elastic and long lasting seal in the instance of :

- Heavy prefabrication and traditional masonry work.
- Partition walls, panels and façades, metal framework.
- Elastic seals in glazing applications, on aluminium, wooden, PVC frames, etc.
- Joints for terracing, fireplaces, acroters.
- Ventilation ducts, piping passages, guttering and downpipes.
- Bonding of mirrors.
- Bonding of materials subject to vibrations.

Key benefits

BLUESIL SLT 10T combines the advantages of a primerless adhesion elastomer and neutrality on most construction materials, including porous surfaces.

BLUESIL SLT 10T can be used on clear glass, layered glass and all other glazed surfaces, metals, wood (painted or otherwise), PVC, polycarbonates, polymethacrylates, ABS, concrete, cellular concrete, granite, marble, etc.

BLUESIL SLT 10T does not generally cause staining of surfaces. Nonetheless, specific testing is required in the instance of sensitive surfaces, especially porous ones (marble, stone, etc.).

Chemical resistance: once cured BLUESIL SLT 10T has good resistance to diluted bases and to salt mist. We can also observe good behaviour to the temporary action of common solvents and hydrocarbons with for the latter, slight swelling of the sealant during exposure. However, we can note modification to a greater or lesser extent of its characteristics under the action of acids and chemical oxidants.

Its mechanical and adhesive properties are not affected by solar radiation, rain, snow or ozone and enable it to perform its function over many years.

Typical properties

	BLUESIL SLT 10T OFF WHITE	BLUESIL SLT 10T PVC WHITE
Hardness ISO 868	22 sh.A	22 sh.A
Elongation NF ISO 37	600 %	600 %

BLUESIL SLT 10T

Technical Data Sheet n° 1691-V2 – 2019/03/13

Tensile strength NF ISO 37	1.0 MPa	1.0 MPa
----------------------------	---------	---------

1. Before curing

Type of sealant.....	alcoxy
Specific gravity, approx.	1.38
Flow resistance* (EN 27390), mm, approx.	1
Extrusion (standard NM 495A, 3mm/3 bar) g/min, approx.....	70
Viscosity (strain 3000 N/m ² , 20°C), Pa.s, approx.....	330

2. Curing

Skin over time*, min, approx.....	16
Tack-free time *, min, approx.	90
Curing rate, mm / 1 day, approx.	3
mm / 3 days, approx.	5
mm / 7 days, approx.	9
Application temperature, °C	+5 to +40

3. After curing

Shore A hardness (DIN 53505), approx.	22
(Piling of 3 x 2 mm films, after curing for 7 days)	
Elastic recovery (ISO 7389),%	>85
Joint movement capability, %	25
Operating temperature, °C	-50 to +150
Mechanical properties on a 2 mm thick film (NF T 46002)*	
Modulus at 100% elongation, MPa, approx.	0.40
Tensile strength, MPa, approx.	1.0
Elongation at break, %, approx.	600
Mechanical properties on slabs (EN 28339)*	
Modulus at 100% elongation, MPa, approx.	0.35
Tensile strength, MPa, approx.	0.5
Elongation at break, %, approx.....	250

* at a temperature of 23°C and relative humidity of 50%

Please note: The typical properties are not intended for use in preparing specifications. Please contact our local Sales Department for assistance in writing specifications.

Instruction of use

Surface Preparation:

All surfaces must be dry and clean, free from any dust and grease or anything which may be detrimental to correct adhesion of the sealant.

Degreasing is performed using a pad soaked in solvent, followed by wiping with a clean cloth. Dust is removed using oil-free compressed air.

- Glass and all glazing materials: degrease with alcohol or methylethyl ketone
- Aluminium, light alloys, stainless steel: same procedure
- Other metals: lightly abrade the surface then degrease
- Wood, lightly abrade the surface then remove dust
- Plastics : degrease using an agent recommended by the supplier
- Concrete and other alkaline surfaces: brush and dust

Primer:

BLUESIL SLT 10T does not require a primer on most usual surfaces.

BLUESIL SLT 10T

Technical Data Sheet n° 1691-V2 – 2019/03/13

In the case of joints likely to be immersed and especially for porous surfaces, the application of a specific primer (BLUESIL PRIM 12076) is recommended, please consult us.

Comment: this choice will always be made following preliminary tests carried out on the surface in question. It should preferably be applied using a soft haired brush generally, in the case of a highly absorbent surface, a second coat will be applied after the first has dried.

Joint dimensions:

Expansion joints are generally subject to local regulations. Unless otherwise required, the following rule-of-thumb should be complied with: width of twice the thickness (taking account of the acceptable deformation for the sealant).

Applying the sealant:

Once an appropriate seal backing has been put in place (closed-cell polyethylene foam with surface skin or open cell polyurethane foam) the sealant should be applied taking care to ensure that the joint is completely filled. Smoothing off the seal ensures good contact between the sealant and the bonding surfaces. It should be carried out using a dry spatula before the surface skin is formed.

Areas soiled with fresh sealant may be cleaned with a dry pad or a pad soaked in a solvent. If the sealant is already cured it can be removed by scraping (e.g. using a razor blade) or using a special silicones remover.

For more information, please consult us.

Packaging

- BLUESIL SLT 10T OFF WHITE is available in
 - Drum of 260 KG (573.3 LB)
- BLUESIL SLT 10T PVC WHITE is available in
 - Pallet of 1200 KG (2646 LB)

Storage and shelf life

When stored in its original packaging:

BLUESIL SLT 10T OFF WHITE may be stored at a temperature between -20 °C/ -4 °F and 30 °C/ 86 °F for up to 12 months from its date of manufacturing.

BLUESIL SLT 10T PVC WHITE may be stored at a temperature between -20 °C/ -4 °F and 30 °C/ 86 °F for up to 12 months from its date of manufacturing.

Comply with the storage instructions and expiration date marked on the packaging. Beyond this date, Elkem Silicones no longer guarantees that the product meets the sales specifications.

Regulation

Please consult your local ELKEM SILICONES sales office.

Limitations

BLUESIL SLT 10T must not be used:

- to produce aquariums,
- to produce swimming pool joints,
- in food grade applications.

Joints produced with BLUESIL SLT 10T can be painted. However, paints do not generally have enough elasticity to follow joint deformation, without the risk of cracking. Prior compatibility tests are also recommended, considering the variety of paints that exist.

Particular attention should be paid to application on materials which can exude certain

BLUESIL SLT 10T

Technical Data Sheet n° 1691-V2 – 2019/03/13

components over time (butyl sealant, EPDM rubbers, polychloroprenes, etc.).
Moreover, the following features should also be considered:

- Horizontal joints: in pedestrian zones or when there is a risk of excessive abrasion, the sealant joint must be sunk slightly below the adjacent surface. In the case of outdoor application, a primer will be used to ensure perfect adhesion of this joint considering the risks of prolonged immersion (see paragraph on primers).
- For any other application where the joint is immersed, please consult us.
- In the case of bonding of mirrors, perform prior testing to ensure compatibility with surface silvering.

Safety

Please consult the Safety Data Sheet of:
BLUESIL SLT 10T OFF WHITE and BLUESIL SLT 10T PVC WHITE

Visit our website www.silicones.elkem.com

Warning to the users

The information contained in this document is given in good faith based on our current knowledge. It is only an indication and is in no way binding, particularly as regards infringement of or prejudice to third party rights through the use of our products. ELKEM SILICONES guarantees that its products comply with its sales specifications. This information must on no account be used as a substitute for necessary prior tests which alone can ensure that a product is suitable for given use. Determination of the suitability of product for the uses and applications contemplated by users and others shall be the sole responsibility of users. Users are responsible for ensuring compliance with local legislation and for obtaining the necessary certifications and authorisations. Users are requested to check that they are in possession of the latest version of this document and ELKEM SILICONES is at their disposal to supply any additional information.