

# Silcoflex 590

## One-component low modulus alcoxy (neutral) silicon sealant for indoor and outdoor use



### DESCRIPTION

Silcoflex 590 is a one-component low modulus silicone sealant with neutral crosslinking. Cures at room temperature under the action of atmospheric moisture to provide a permanently flexible silicone elastomer. The product has outstanding characteristics of workability, adhesion to various substrates and allow to create elastic joints for perimeter finishes, windows and building applications in areas of high humidity, such as bathrooms.

#### Certified and tested according to:

EN 15651 – 1: Class 25 LM F - EXT - INT - CC

EN 15651 – 2: Class 25 LM G - CC

EN 15651 – 3: Class XS1

ISO 11600 – G, class 25 LM

ISO 11600 – F, class 25 LM – Façade

SNJF Label – Vitrage 25E and Façade 25E

EMICODE EC 1 PLUS

### APPLICATION FIELDS

Sealing of joints on wooden, metal and plastic windows and doors. Sealing of joints on walls, facades and metal constructions. Suitable for sealing windows and for joints in bathroom areas.

### FEATURES

- Rapid cross-linking
- Primerless adhesion to most materials
- Not corrosive to metals
- Suitable for alkaline substrates such as concrete, mortar, fibrous concrete
- Contains fungicides, suitable for use in areas of high humidity
- Adheres excellently to glass and metals
- Odorless

- Excellent resistance to weathering, UV and aging
- Easy extrusion at low (+ 5 ° C) and high (+ 40 ° C) temperatures
- Flexible at low (-40 ° C) and high (+ 150 ° C) temperatures
- Non sagging

## TECHNICAL DATA

<b>Aspect</b>	Thixotropic paste, non-sagging
<b>Colour</b>	Trasparent, various colors (see catalogue)
<b>Chemical nature</b>	Alcoxy curing silicone
<b>Curing mechanism</b>	Moisture curing
<b>Curing through volume [mm]</b> (NPT Method 07) (24h - 23°C and 50% RH)	ca. 3.0
<b>Shore A</b> (ISO 868)	ca. 22
<b>Specific gravity [g/cm<sup>3</sup>]</b> (NPT Method 06) (23°C and 50% RH)	ca. 1.02
<b>Skin time [min]</b> (NPT Method 17) (23°C and 50% RH)	ca. 25
<b>Elastic modulus at 100% [N/mm<sup>2</sup>]</b> (ISO 8339)	ca. 0.37
<b>Tensile strength [N/mm<sup>2</sup>]</b> (ISO 8339)	ca. 0.7
<b>Tear strength [N/mm<sup>2</sup>]</b> (ISO 34)	Ca. 4.0
<b>Elongation at break [%]</b> (ISO 8339)	>300
<b>Joint movement capability [%]</b> (ASTM C920)	± 25
<b>Application temperature [°C]</b>	from +5 to +40
<b>Temperature resistance [°C]</b>	from -40 to +150

## APPLICATION

To obtain maximum performance in terms of adhesion, the surfaces concerned must be dry and clean; in particular, degreasing solvents can be used to remove grease. The acetic silicone adheres to most surfaces (anodized aluminum, glass, ceramic, polyester). In the presence of adhesion problems on particular surfaces, it is advisable to consult the manufacturer for the choice of a specific Primer. The product is not over-paintable.

Remove the top part of the threaded top screw on the plastic nozzle and cut it at an angle according to the desired bead thickness and profile. Fit the cartridge into a manual or pneumatic air operated gun (provided with telescopic piston) and extrude the sealant carefully preventing air entrapment.

Once opened, packs should be used up within a relatively short time. The optimum operating temperature for both substrate and sealant is between 15°C and 25°C.

Tooling and finishing must be carried out within the tack-free time of the sealant. Since system is moisture-cured, permit sufficient exposure to air. Bonded elements may require additional holding or support during curing period.

SILCOFLEX 590 must not be used for insulating glass applications and not recommended for use on marble, natural stones (may cause halos), for structural glazing applications, for sealing of aquaria or for longer-term use under water. Not suitable for food processing application; please use instead S-Sil Food, NSF ANSI 51 certified.

## CLEANING OF EQUIPMENT AND PERSONAL PROTECTIVE MEASURES

Clean the tools used with white spirit. Once hardened, the product can only be removed mechanically. Avoid skin contact by using latex, rubber or polyethylene gloves. If it comes in contact with the skin, remove immediately and wash with soap and water.

## PACKAGING

PE-cartridge 300ml:	24 cartridges per box
Sausage 400 ml (white-grey-black)	12 pieces per box
Sausage 600 ml (white-grey)	20 pieces per box

## STORAGE AND SHELF LIFE

Silcoflex 590 can be stored for 12 months in its original packaging (unopened container) between 10°C and 25°C in a cool, dry place. Keep away from wet areas, direct sunlight and heat sources.

## GENERAL INFORMATIONS

The information contained in this technical data sheet is to the best of our knowledge correct, being based on our knowledge and experience to date and cannot be used as a guarantee, due to the various different materials present on the market and the fact that the application conditions are not under our direct control and supervision. NPT srl, however, guarantees constant product quality. NPT srl, has the right to modify or up-date this technical data sheet according to requirements. Customers are kindly requested to verify that they are in possession of the latest version.

ALWAYS CONSULT THE MATERIAL SAFETY DATA SHEET BEFORE USING THE PRODUCT