

Technical Data Sheet Silcoflex 583 Ver. 5.1 January 2022

# SILCOFLEX 583

## One-component silicone sealant with acetic cross-linking,

### high temperatures resistant

#### DESCRIPTION

Cures at room temperature under the action of atmospheric moisture to provide a permanently flexible elastomer with exceptional adhesion and resistance to high temperatures, maintaining properties up to 250°C (300°C for short periods).

#### **AREAS OF APPLICATION**

Sealing of joints in furnace and chimney construction. Suitable for industrial applications, bonding and sealing in boilers, stoves, waste boxes, etc. It can also be used to create gaskets in the automotive sector (engines, gearboxes).

#### **FEATURES**

- Solvent-free
- Rapid skin formation and reticulation.
- Adheres excellently to glass and metals
- Non sagging
- Excellent resistance to bad weather, UV and aging
- Easy extrusion at low (+ 5 ° C) and high (+ 40 ° C) temperatures
- Flexible at low (-40 ° C) and very high (+ 250 ° C) temperatures

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#### **TECHNICAL DATA**

Appearance	Tixotropic paste, non-sagging
Chemical nature	Acetoxy curing silicone
Curing Mechanism	Moisture-curing
Color	Black
Curing through volume [mm] (NPT Method 07) (24h - 23°C and 50% RH)	> 3.0
<b>Density</b> [g/cm <sup>3</sup> ] (NPT method 06) (23°C and 50% RH)	ca. 1.03
Hardness Shore A (ISO 868)	ca. 22
Skin time [min] (NPT Method 17) (23°C and 50% RH)	ca. 15
Elastic modulus at 100% [N/mm <sup>2</sup> ] (ISO 8339)	ca. 0.47
Tensile strength [N/mm <sup>2</sup> ] (ISO 8339)	ca. 0.7
Tear strength [N/mm] (ISO 34, method C)	ca. 4.2
Elongation at break [%] (ISO 8339)	ca. 250
Application temperature [°C]	From +5 to +40
Temperature Resistance [°C]	From -40 to +250 (max 300 peaks)

#### 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. <u>The product is not overpaintable</u>.

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 moisturecured, permit sufficient exposure to air. Bonded elements may require additional holding or support during curing period.

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SILCOFLEX 583 must not be used for insulating glass applications and not recommended 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

#### STORAGE AND SHELF LIFE

SILCOFLEX 583 can be stored for 18 months in its original packaging (unopened container) between 10°C and 25°C in a cool, dry place. The storage temperature should not exceed 25°C for extended periods of time. Keep away from wet areas, direct sunlight and heat sources.

#### **GENERAL INFORMATION**

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

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