



Technical Data Sheet S-Sil Food
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S-Sil Food

One-part, acid-curing, low-modulus silicone for joints sealing and glazing in food equipment materials and drinking water contact applications. Certified according to ANSI/NSF Standard 51, ISEGA & US FDAR No. 21

DESCRIPTION

S-Sil food is a one-part acetoxy-curing low modulus silicone sealant. It cures at room temperature under the influence of atmospheric moisture to give permanently flexible silicone rubber with excellent primerless adhesion to most non-porous siliceous material, e.g., glass, vitrified surfaces, many plastics and metals and most paints.

Certified according to:

NSF ANSI 51
ISEGA EC Regulation 1935/2004 for food contact (62. Mtl. BfR)
US FDAR No. 21 CFR 177.1210 und 177.2600
ISO 11600 G - Class 25 LM
DIN 18545-2 - Class E
TT-S-00230C - Type II, Class A
BS6920 WRASEN

AREAS OF APPLICATION

Sealing in the food sector, e.g. in dairies, abattoirs, beverage and food production plants, canteen kitchens etc. Sealing and glazing in industrial applications including food equipment materials, silo and container construction, sealing of expansion and connection joints. Certified according to ANSI/NSF Standard 51; Health and sanitation requirements for materials used in the making of commercial food equipment.

FEATURES

- 100% Silicone, free from solvents
- Suitable for food and drinking-water contact
- Rapid crosslinking, short skin time
- Adheres excellently to glass and vitrified surfaces, plastics and most coatings
- Easy to gun with excellent tooling consistency. Non-sagging, low shrinkage
- Easy extrusion at low (+5°C) and high (+40°C) temperatures
- Flexible at low (-40°C) and high temperatures (+100°C)
- Excellent weathering resistance for outdoor application (UV, rain, snow, etc.).
- Permanently elastic; accommodates joint movement of $\pm 25\%$
- Excellent primerless adhesion on all typical construction and industrial materials
- Excellent resistance to ageing, weathering; colour stable and non-yellowing

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TECHNICAL DATA

Appearance	Thixotropic paste
Chemical nature	Silicone, acetoxy curing
Curing Mechanism	Moisture-curing
Color	Grey, white, black, transparent
Curing through volume [mm] (NPT Method 07) (24h - 23°C and 50% RH)	ca. 2
Density [g/cm³] (NPT method 06) (23°C and 50% RH)	ca. 1.04
Hardness Shore A (DIN 53505)	ca. 20
Skin time [min] (NPT Method 17) (23°C and 50% RH)	ca. 15
Elastic modulus at 100% [N/mm²] (ISO 8339)	ca. 0.37
Tensile strength [N/mm²] (ISO 37 DIN 53504)	ca. 0.6
Tear strength [N/mm] (ISO 34)	ca. 4.2
Elongation at break [%] (ISO 37 DIN 53504)	ca. 250
Joint movement capability (ASTM C920)	±25 % of joint width
Application temperature [°C]	From +5 to +40
Temperature Resistance [°C]	From -40 to +100, with brief points at +120

APPLICATION

The surfaces to be treated should be perfectly clean, dry and free from dust and grease. It is necessary to treat the bonding surface according to NPT application guidelines. It is advisable to carry out preliminary adhesion tests on the support.

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.

S-Sil Food must not be used for insulating glass applications, on substrates such as marble, concrete, fibrous cement, and mortar as the product releases acetic acid during vulcanization, in contact with metals such as lead, copper, brass or zinc due to corrosion.

S-Sil Food may be discolored in contact with some organic elastomers, e.g. EPDM, APTK and neoprene. It is not recommended for structural glazing applications, as a mirror adhesive, for sealing of aquaria or for longer-term use under water.

CLEANING OF EQUIPMENT AND PERSONAL PROTECTIVE MEASURES

Clean the tools used with acetone or solvent. When the adhesive has not yet hardened, it can be removed using paper or a cloth. 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

S-Sil Food can be stored for 12 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