

H.T. SIL N

PRODUCT DESCRIPTION

H.T. SIL N is a one-part fast curing acetoxy silicone sealant.

PRODUCT CHARACTERISTICS

H.T. SIL N is specifically designed and recommended for sealing and joining construction applications where high heat resistance is required for long periods.

- Excellent heat resistance up to +250°C for long periods and up to +275° for short exposures.
- Excellent resistance to weather, ozone, UV and chemicals.
- Non-sagging behaviour for horizontal, vertical and overhead applications.
- Excellent adhesion to glass, vitrified surfaces, ceramic materials, many plastics (preliminary adhesion test always recommended), many painted materials (preliminary adhesion test always recommended).
- Ready gunnability at low (+5°C) and high (+40°C) temperatures.
- Good tooling properties.

USES (professional)

- Sealing of chimneys, ovens, dryers.
- Joint connection of heating systems.



LIMITATIONS

- H.T. SIL N must not be used for insulating glass applications nor for structural glazing bonding.
- It is not recommended for the production of aquaria nor for longterm use under water.
- It should not be used in contact with marble, natural stones.
- It should not be used in contact with metals such as lead, copper, brass or zinc due to acid acetic corrosion.
- It should not be used on substrates such as concrete, fibrous cement and mortar.
- It should not be used on polycarbonate and acrylic sheets.
- It should not be used in contact with materials bleeding oily matters or plasticizers, nor on surfaces to be overpainted.
- It is not suitable for use in food contact applications.
- The sealant is not recommended for use in totally confined joints not exposed to air moisture nor for use in joints submitted to abrasion.
- Do not use in extreme temperature conditions, or on damp, frozen, contaminated surfaces.
- Do not use on excessively acidic or basic substrates.
- It is not suitable for use as a mirror adhesive.
- For any application not listed in this document please contact our Technical Service.

TECHNICAL DATA

Polymers the curing system:	100% silicone, acetoxy
Consistency:	tixotropic, non-slumping paste
Application temperature:	+5°C / +40°C
Specific gravity:	1,03 g/cm ³
Skin forming time (23°C / 50% R.H.):	20 minutes
Curing time:	1 - 5 days depending on temperature and humidity and on cross section of applied sealant cord
Shore A Hardness (ISO 868):	25
100% Modulus (ISO 8339-A):	0,45 MPa
Tensile strength (ISO 8339-A):	0,70 N/mm ²
Ultimate elongation (ISO 8339-A):	250%
Movement capability (ISO 11600):	25%
Tear resistance (ISO 34-C):	4,2 N/mm
Service temperature range:	-40°C / +250°C

The values in this table must not be considered as specifications.



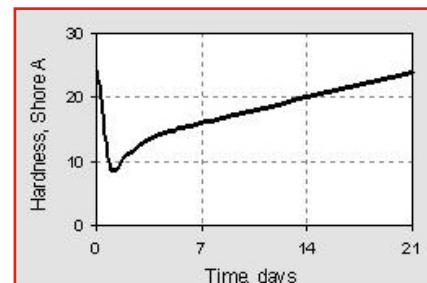
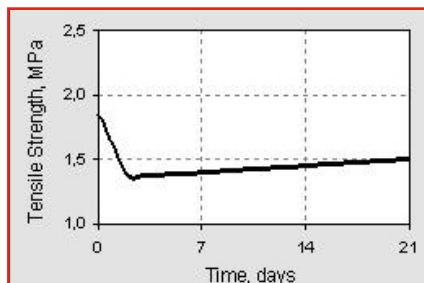
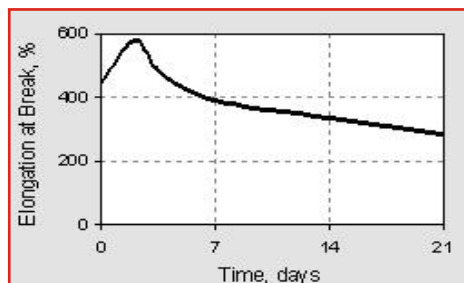
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TEMPERATURE RESISTANCE

H.T. SIL N is heat stabilized and remains unaffected by long term exposure to extreme temperatures up to 250°C.

It can also be used for shorter periods (some weeks) at temperatures up to 275°C.

Pictures here below show the effect of heat aging at 275°C on the elongation at break, tensile strength and hardness of the silicone rubber.



METHOD OF USE

Adhesion and surfaces preparation: the surfaces that will be in contact with the sealant must be clean, dry and free of all loose material such as dust, dirt, rust, oil and other contaminants.

Non-porous substrates should be cleaned with a solvent and a clean, lint-free, cotton cloth.

Remove residual solvent before it evaporates with a fresh clean, dry cloth.

H.T. SIL N shows a good adhesion onto glass, glazed surfaces and porcelain.

Onto stainless steel, aluminium, painted metals and plastics, the use of a suitable **Primer** may be required, so previous testing is always recommended. See table of "**Primers for silicone**" sealants.

It is the responsibility of the user to test the compatibility of the sealant with the adjoining materials.

Incompatible substances like coating materials (paints, varnishes and glazes) or organic plasticizer containing rubbers (EPDM, butyl and neoprene) can lead to discoloration or other impairments like loss of adhesion of the sealant.

Materials in direct contact with the applied sealant like cleaning agents and materials in indirect contact like gaseous emissions can damage the sealant in its function or change its appearance.

Because of the multitude of these materials, Fratelli Zucchini S.p.A. cannot make a general statement to the compatibility of materials with the sealant. In case of doubt the user shall conduct appropriate preliminary tests.

The time until complete curing may be extended at lower temperature, lower humidity, increasing film thickness or by low volume of air exchange.

Recommended joint dimension: joints designed to accommodate movement require a rectangular section, with depth of at least 3 mm and width at least four times of total expected movement. Width must be always greater than depth.

Sealant application: apply sealant using a hand or air gun and practise a suitable pressure against the joint walls.

Any required tooling should be carried out immediately.

Solvent wiping: dirty tools can be solvent wiped with **Solvente ST/512**.

After curing **H.T. SIL N** can be removed mechanically.

H.T. SIL N can't be overpainted.

SAFETY AND HEALTH

See Safety Data Sheet.

During vulcanization acetic acid is released. These vapors should not be inhaled for long periods or in high concentration.

Hence, good ventilation of the work place is necessary.

Should uncured silicone rubber come into contact with eyes or mucous membranes, the affected area must be rinsed thoroughly with water as irritation will otherwise be caused.

Cured silicone rubber, however, can be handled without any risk to health.

STORAGE STABILITY

280 ml. cartridge 12 months from the date of manufacture.

600 ml bag. 12 months from the date of manufacture.

20 kg drum 6 months from the date of manufacture.

Store the sealed product in the original packaging, in a dry place at a temperature between +5°C and +25°C.



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PACKAGING

Code	Colour	Packaging	Unit
-	red	280 ml. cartridge	24
-	black	280 ml. cartridge	24

Other sizes available on request.

**Fratelli Zucchini S.p.A.**

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