

Product Data Sheet
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Sika® Firesil-N

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Neutral-curing, flame-retardant silicone sealant

Product Description

Sika® Firesil-N is a one part neutral curing, flame retardant silicone sealant suitable for indoor and outdoor applications.

Uses

Sika® Firesil-N is suitable for applications in the construction industry and industrial areas where high standards are set in respect to flame retardance of the material.

Characteristics / Advantages

- Flame retardant
- Provide primerless adhesion to a wide range of substrates
- Excellent UV and weathering resistance
- Low odour
- Solvent free
- Non corrosive

Tests

Approvals / Standards

DIN 4102 B1
ISO 11600-G-Class 25 LM
ASTM C-920 Class 25
Tested according to BS 476-20

Product Data

Form

Colour

Grey

Packaging

300 ml cartridges

Storage

Storage Conditions / Shelf Life

12 months from date of production if stored in undamaged original sealed containers, in dry conditions and protected from direct sunlight at temperatures between +10°C and +25°C.

Construction



Technical Data

Chemical Base	Alcoxy silicone, neutral curing.		
Density	~ 1.5 kg/l (colour grey)		(DIN 53 479-B)
Skinning Time	~ 25 minutes (+23 °C / 50% r.h.)		(EN ISO 291)
Curing Rate	~ 2.0 mm/24h (+23 °C / 50% r.h.)		(EN ISO 291)
Movement Capability	25%		(ISO 11600)
Sag Flow	< 2 mm		(DIN EN 27 390)
Service Temperature	-40 °C to +150 °C Short term exposure up to +220 °C (~ 30 minutes).		

Mechanical / Physical Properties

Tensile Strength	~ 0.6 N/mm ² (+23 °C / 50% r.h.)		(ISO 8339)
Tear Strength	~ 4.0 N/mm ² (+23 °C / 50% r.h.)		(DIN 34 method C)
Shore A Hardness	~ 25 (after 28 days)		(ISO 868)
E-Modulus	~ 0.4 N/mm ² at 100% elongation (+23 °C / 50% r.h.)		(ISO 8339)
Elastic Recovery	> 90% (+23 °C / 50% r.h.)		(DIN EN 27 389)

System Information

Application Details

Consumption / Joint Design

The joint width should be designed to accommodate the movement capability of the sealant. In general the joint width should be > 6 mm and < 24 mm.

Joint width	10 mm	15 mm	20 mm
Joint depth	7 mm	10 mm	10 mm
Joint length / 300 ml	~ 4.5 m	~ 2 m	~ 1.5 m

Substrate Quality

Clean and dry, homogeneous, free from grease, dust and loose particles. Paint, laitance and other poorly adhering particles must be removed. Standard construction rules must be observed.

Substrate Preparation / Priming

Refer to Sika Primer table.

Application Conditions / Limitations

Substrate Temperature	+5 °C min. / +40 °C max.
Ambient Temperature	+5 °C min. / +40 °C max.
Substrate Humidity	Substrate must be dry.

Application Instructions

Application Method / Tools

Sika® Firesil-N is ready to use.

After suitable joint preparation and properly prepared substrate, the sealant is gunned into place and tooled within 5 minutes, using a spatula which has been dipped in soapy water.

Masking tape is then removed immediately.

Uncured material can be removed by using a suitable solvent or an approved sealant remover.

Cured material can only be removed mechanically.

Cleaning of Tools

Clean all tools and application equipment with Thinner C immediately after use. Hardened / cured material can only be mechanically removed.

Notes on Application / Limitations

Do not use on bituminous substrates, natural rubber, chloroprene, EPDM or on building materials which might bleed oils, plasticisers or solvents.

Do not use in totally confined space because Sika® Firesil-N requires atmospheric moisture to cure.

Bleeding can occur on porous substrates such as concrete, marbles, granites and other natural stones. On sensitive substrates, specific pretesting should be carried out.

Sika® Firesil-N is not recommended for use in submerged joints or in joints where physical abuse or abrasion are likely to occur.

Sika® Firesil-N is not recommended for structural glazing or insulated glazing applications. It is also not suitable for food contact applications.

Sika® Firesil-N is neither tested nor represented as suitable for medical or pharmaceutical uses.

Value Base

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

Local Restrictions

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

Legal Notes

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.



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