

Sika® Firesil Marine N

Sealant with low flame spread characteristics

Technical Product Data

Chemical base	1-C silicone
Colour (CSQP ¹⁾ 001-1)	Light grey
Cure mechanism	Humidity-curing
Cure type	Alkoxy
Density (uncured) (CSQP 006-4)	1,45 kg/l approx.
Non-sag properties (CSQP 061-4/DIN EN ISO 7390)	Good
Application temperature	5 - 35 °C
Tack free time ²⁾ (CSQP 019-1)	25 min. approx.
Curing speed (CSQP 049-1)	2,5 mm / 24 h, see diagram
Shrinkage (CSQP 014-1)	3% approx.
Shore A-hardness (CSQP 023-1 / ISO 868)	25 approx.
Tensile strength (CSQP 020-3 / ISO 8339)	0,6 N/mm ² approx.
Elongation at break (CSQP 020-4 / ISO 8339)	300% approx.
Tear propagation resistance (CSQP 045-1 / ISO 34)	4 N/mm approx.
Glass transition temperature (CSQP 509-1 / ISO 4663)	-40°C approx.
Service temperature (CSQP 513-1)	permanent 160°C max.
Short term	4 hours 200°C
Shelf life (storage below 25°C) (CSQP 016-1)	12 months

¹⁾ CSQP = Corporate Sika Quality Procedure ²⁾ 23°C / 50% r.h.

Description

Sika® Firesil Marine N represents a fire retardant one-component, fast-curing silicone sealant, based on a non-corrosive curing system. The cured product provides a soft, elastic seal, supplying excellent resistance to fire even when directly exposed to a nearby heat source.

Sika® Firesil Marine N meets the requirements of DIN 4102 B1 and the regulations set out by the International Maritime Organisation (IMO). Sika Firesil® Marine N is manufactured in accordance with the ISO 9001 / 14001 quality assurance system and with the responsible care program.

Product Benefits

- One-part formulation
- Elastic
- Resists ageing and weathering
- High fire resistance
- Bonds well to a wide variety of substrates

Areas of Application

General purpose sealant for applications requesting fire resistance according to DIN 4102 B1 and as sealing of gaps, cable ducts, grommets etc. where compliance with IMO 653 (16) is required.



Cure Mechanism

Sika® Firesil Marine N cures by reaction with atmospheric humidity. At low temperatures the water content of the air is lower and the curing reaction proceeds more slowly, (see diagram below).

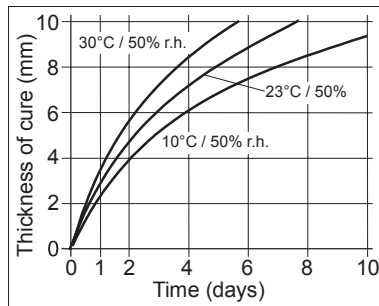


Diagram 1: Curing speed
Sika® Firesil Marine N

Chemical Resistance

Sika® Firesil Marine N is resistant to UV-radiation, fresh water, seawater and proprietary aqueous cleaning agents; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; not resistant to organic acids, concentrated mineral acids, caustic solutions and solvents. The above information is offered for general guidance only. Advice on specific applications will be given upon request.

Method of Application

Surface preparation

Surfaces must be clean, dry and free from all traces of oil, grease and dust.

Advice on specific applications is available from the Technical Service Department of Sika Industry.

Application

Cut off the nipple from the thread of the cartridge. Trim the nozzle to the required size. Use a cartridge hand-, air- or battery driven gun.

Tooling and finishing

Tooling and finishing must be carried out within the tack-free time of the sealant. We recommend the use of Sika® Tooling Agent N. Other finishing agents or lubricants must be tested for suitability and compatibility.

Removal

Uncured Sika Firesil® Marine N can be removed from tools and equipment with Sika® Remover-208 or another suitable solvent. Once cured, the material can only be removed mechanically.

Hands and exposed skin should be washed immediately using Sika® Handclean Towel or a suitable industrial hand cleaner and water. Do not use solvents!

Overpainting

Sika Firesil® Marine N is not overpaintable.

Further Information

Copies of the following publications are available on request:

- Material Safety Data Sheets
- Marine Application Guide

Packaging Information

Cartridge	300 ml
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Important

For information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Material Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

Note

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 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 proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.



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