Product Data Sheet Edition 21/02/2012 Identification no: 02 05 01 04 011 0 000003 Sika® Firesil-N

Sika[®] Firesil-N

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 /	Flame retardant		
Advantages	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, 12 cartridges per box 96 boxes per Euro Pallet (=1152 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.		



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 therm exposer up to +300°C (~ 30 minutes).	

Mechanical / Physical Properties

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

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	Advice Instructions after primer list.			
Application Conditions / Limitations				
Substrate Temperature	+5°C min. / +40°C max			
Ambient Temperature	+5°C min. / +40°C max.			
Substrate Moisture Content	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 witch 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 Colma Cleaner immediately after use. Hardened / cured material can only be mechanically removed.	
Notes on Application / Limitations	Do not use on bituminous substrates, natural rubber, chloropene, EPDM or on building materials which might bleed oils, plastisicers 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 or access on the Internet under <u>www.sika.co.za</u> .	



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3/3