

PRODUCT DATA SHEET

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STRUCTURAL SEALANT GLAZED CURTAIN WALLS

Sikasil® SG-550

TWO PART STRUCTURAL SILICONE ADHESIVE

Technical Data	Properties	Component A	Component B
	Chemical Base	2-C Silicone	
Colour	Mixed	White	Black
		Black	
Cure Mechanism	Polycondensation		
Cure Type	Neutral		
Density (CQP 006-04)	Mixed	1.35 kg/L	1.11 kg/L
		1.30 kg/L	
Mixing Ratio (+/- 10 %)	A:B by volume	10:1	
	A:B by weight	12:1	
Viscosity (CQP 029-5)		1,100 Pa's	200 Pa's
Consistency	Paste		
Application Temperature	5 °C to 40 °C		
Snap Time ² (CQP 554-1)	30 mins		
Tack-Free Time ² (CQP 019-2)	150 mins		
Shore A Hardness (CQP 023-1/ISO 868)	55		
Tensile Strength (CQP 036-1/ISO 37)	3.4 MPa		
Elongation at Break (CQP 036-1/ISO 37)	300 %		
Tear Propagation Resistance (CQP 045-1/ISO 34)	4.5 N/mm		
Modulus (CQP 036-1/ISO 37)	100 %	1.7 MPa	
Movement Accommodation Capability (ASTM C 719)	+/-12.5 %		
Service Temperature	-40 °C to 150 °C		
Thermal Resistance	4 hours	200 °C	
	1 hour	220 °C	
Shelf Life (Storage below 25 °C) (CQP 016-1)	12 months		
¹ CQP = Corporate Quality Procedure ² 23 °C and 50 % Relative Humidity			

Description Sikasil® SG-550 is a two-part, neutral-curing structural silicone adhesive with very high mechanical strength. It is well-suited wherever higher mechanical strength is required.

- Product Benefits**
- UV and weathering resistant.
 - Meets requirements of EOTA ETAG 002, EN 13022 and ASTM C 1184;
 - SNJF-VEC recognized;
 - Structural silicone adhesive according to ETAG 002, DoP 52182356, certified by Factory Production Control Body, 0757, certificate no. 0757-CPD-596-12-001e, and provided by CE-mark.;

Areas of Application Sikasil® SG-550 is ideal for structural glazing and other bonding applications where high mechanical strength with silicone is required. This product is suitable for professional experienced users only. Tests with actual substrates and conditions must be performed to confirm adhesion and material compatibility.

Cure Mechanism	Sikasil® SG-550 starts to cure immediately after mixing the two components. The speed of the reaction depends mainly on the temperature, i.e. the higher the temperature, the faster the curing process. Heating above 50 °C is not advisable as it may lead to bubble formation. The mixer open time (i.e. the time the material can remain in the mixer without flushing or extrusion of product) is significantly shorter than the Snap Time indicated above. For more information, contact the Technical Services Department of Sika Industry.
Application Limits	Most Sikasil® WS, FS, SG, IG, WT, AS and other engineering silicone sealants manufactured by Sika are compatible with each other and with SikaGlaze® IG sealants. For specific information regarding compatibility between various Sikasil® and SikaGlaze® products, please contact the Technical Services Department of Sika Industry. All other sealants have to be approved by Sika before using them in combination with Sikasil® SG-550. Where two or more different reactive sealants are used, allow the first to cure completely before applying the next. Sikasil® SG, IG and WT sealants and adhesives may only be used in structural glazing or window bonding applications by experienced professionals and after a detailed examination and written approval of the corresponding project details by the Technical Services Department of Sika Industry. The compatibility of gaskets, backer rods, setting blocks and other accessory materials with Sikasil® SG-550 must be tested in advance. The above information is offered for general guidance only. Advice on specific applications will be given upon request. Do not use Sikasil® SG-550 on pre-stressed polyacrylate elements as it may cause environmental stress cracking (ESC).
Surface Preparation	Surfaces must be clean, dry and free from oil, grease and dust. Advice on specific applications and surface pretreatment methods is available from the Technical Services Department of Sika Industry.
Mixing	This is a two-component product that requires thorough mixing for proper performance; mix both components in the correct ratio (to an accuracy of +/- 10%) to obtain a homogeneous and air-bubble-free mixture. Most commercially available metering and mixing equipment is suitable. Please contact Technical Services for specific advice. Note: While Component A is stable in air, Component B is moisture sensitive and must be exposed to air only very briefly.
Application	Joints must be properly dimensioned. The technical values of the adhesive and adjacent building materials, the exposure of the building elements, their construction and size, as well as external loads must form the basis for calculating the necessary joint dimensions. For more information, contact Technical Services.
Tooling and Finishing	Tooling and finishing must be carried out within the Snap Time of the adhesive. Do not use tooling agents!
Removal	Uncured Sikasil SG-550 may be removed from tools and equipment with Sika® Remover-208 or other suitable solvent. The static mixer of the metering and mixing equipment can be cleaned with Sikasil® Mixer Cleaner or other suitable cleaner. Hands and exposed skin should be washed immediately using Sika® Hand Cleaner towels or other suitable industrial hand cleaner and water. Do not use solvents on skin!
Over-Painting	Sikasil® SG-550 is an elastic adhesive and cannot be over-painted.
Further Information	Copies of the following publications are available upon request: <ul style="list-style-type: none"> ▪ <i>Safety Data Sheet</i> ▪ <i>General Guidelines "Structural Silicone Glazing with Sikasil® Adhesives"</i>
Packaging	Component A: 250 kg Drums and 25 kg Pails; Component B: 20 kg Pails
Value Bases	All technical data stated in this Product Data Sheet are laboratory test-based. Current measured values may vary due to factors beyond our influence.
Health and Safety Information	For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY

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, within their shelflife. 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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 may be downloaded from our website at: www.sika.ca

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