

**PRODUCT DATA SHEET**

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STRUCTURAL SEALANT GLAZED CURTAIN WALLS

# Sikasil® SG-20

## HIGH-STRENGTH STRUCTURAL SILICONE ADHESIVE

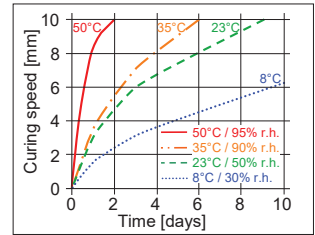
Technical Data		
Chemical Base		1-C silicone
Colour (CQP <sup>1</sup> 001-1)		Black, grey S6 and white S3
Cure Mechanism		Moisture-curing
Cure Type		Neutral
Density (uncured) (CQP 006-4)		1.4 kg/L approx
Non-Sag Properties (CQP 061-4/ISO 7390)		1 mm
Skin Time <sup>2</sup> (CQP 019-1)		15 minutes
Application Temperature		5 °C to 40 °C ambient
Tack-Free Time <sup>2</sup> (CQP 019-3)		180 minutes
Curing Speed (CQP 049-1)		See Diagram 1
Shore A-Hardness (CQP 023-1/ISO 868)		39
Tensile Strength (CQP 036-1/ISO 37)		2.2 MPa
Elongation at Break (CQP 036-1/ISO 37)		450 %
Tear Propagation Resistance (CQP 045-1/ISO 34)		7 N/mm
100% Modulus (CQP 036-1/ISO 37)		0.9 MPa
Thermal Resistance (CQP 513-1)	4 hours 1 hour	200 °C 220 °C
Service Temperature		-40 °C to 150 °C
Shelf Life (Storage below 25 °C) CQP 016-1		9 months
<sup>1</sup> CQP = Corporate Quality Procedure; <sup>2</sup> 23 °C and 50 % Relative Humidity		

**Description** Sikasil® SG-20 is a neutral-curing silicone adhesive which combines mechanical strength with high elongation. It has excellent adhesion to a wide range of substrates commonly used in structural glazing applications.

- Product Benefits**
- Meets requirements of EOTA ETAG 002 (carries ETA), EN 13022, ASTM C 1184;
  - Fire-rated (EN 11925-2/DIN 4102-B1);
  - Outstanding UV- and weathering-resistance;
  - Excellent adhesion to glass, metals, coated metals, plastics and wood;
  - Structural silicone adhesive according to ETAG 002, DoP 61161179, certified by Factory Production Control Body 0757, certificate 0757-CPD-596-10-001 R1e, and provided with the CE-mark.

**Areas of Application** Sikasil® SG-20 can be used as a structural glazing sealant, for bonding of solar modules and other high-demand industrial applications. This product is suitable for professional experienced users only. Tests with original substrates and conditions must be performed to ensure adhesion and material compatibility.

**Cure Mechanism** Sikasil® SG-20 cures by reaction with atmospheric moisture. At low temperatures, the water content of the air is lower and the curing process functions more slowly.



**Diagram 1:**  
Sikasil® SG-20 curing speed

<b>Application Limits</b>	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-20. 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-20 must be tested in advance. The above information is offered for general guidance only. Advice on specific applications will be given upon request.
<b>Surface Preparation</b>	Surfaces must be clean, dry and free from oil, grease and dust. Surface treatment depends on the specific nature of the substrates and is crucial for a long-lasting bond.
<b>Application</b>	The optimum temperature for substrate and sealant is between 15 °C and 25 °C. Sikasil® SG-20 can be processed with hand-, pneumatic-, or electric-driven piston guns as well as pump equipment. For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Industry. Joints must be properly dimensioned. Basis for calculation of the necessary joint dimensions are the technical values of the adhesive and the adjacent building materials, the exposure of the building elements, their construction and size, as well as external loads. Joints deeper than 15 mm must be avoided.
<b>Tooling and Finishing</b>	Tooling and finishing must be carried out within the Skin Time of the adhesive. When tooling freshly applied Sikasil® SG-20, press the adhesive into the joint flanks to achieve proper wetting of the bond surface. No tooling agents should be used.
<b>Removal</b>	Uncured Sikasil® SG-20 may 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® Hand Cleaner towels or suitable industrial hand cleaner and water. Do not use solvents!
<b>Over-painting</b>	Sikasil® SG-20 cannot be over-painted.
<b>Further Information</b>	Copy of the following publications are available upon request: <ul style="list-style-type: none"> <li>▪ <i>Safety Data Sheet</i></li> <li>▪ <i>General Guidelines "Structural Silicone Glazing with Sikasil® Adhesives"</i></li> </ul>
<b>Packaging</b>	300 ml cartridges, 600 ml unipack/sausages, 25 kg pails and 270 kg drums
<b>Value Bases</b>	All technical data stated in this Product Data Sheet are laboratory test-based. Current measured values may vary due to factors beyond our influence.
<b>Health and Safety Information</b>	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](http://www.sika.ca)

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