

**SikaGlaze® IG-50****Mercury-free polyurethane insulating glass secondary sealant**

## Technical Product Data

Properties	SikaGlaze® IG-50 A	SikaGlaze® IG-50 B (liquid) and SikaGlaze® IG-50 Paste B
Chemical base	Polyols	Isocyanate derivatives
Colour (CQP <sup>1</sup> 001-1)	Beige	Black
	mixed	Black
Cure mechanism	Polyaddition	
Density (uncured) (CQP 006-4)	1.65 kg/l approx.	1.13 kg/l approx.
	mixed	1.62 kg/l approx.
Mixing ratio	by volume	100 : 10
	by weight	100 : 7
Viscosity <sup>2</sup> (ISO 3219)	SikaGlaze® IG-50 A SikaGlaze® IG-50 B (liquid) SikaGlaze® IG-50 Paste B	400 Pa·s approx.  3 Pa·s approx. 20 Pa·s approx.
Consistency	Paste	
Slump (Boeing Jig, ASTM D 2202)	< 2 mm	
Application temperature	10 - 30°C (50 - 86°F)	
Snap time <sup>2</sup> (CQP 554-1)	30 min approx.	
Tack free time <sup>2</sup> (EN 14187-2)	2.5 h approx.	
Shore A hardness <sup>2</sup> (CQP 023-1 / ISO 868)	4 hours	20 approx.
	24 hours	40 approx.
	7 days	50 approx.
Water vapour transmission rate (EN 1279-4)	3.3 g/(m <sup>2</sup> ·24h·2 mm)	
Gas diffusion (argon) (EN 1279-4)	0.01 g/(m <sup>2</sup> ·h)	
Tensile strength (CQP 555-1 / ISO 8339)	0.9 N/mm <sup>2</sup> approx.	
Shelf life (CQP 016-1) (storage below 25°C (77°F))	6 months	

<sup>1)</sup> CQP = Corporate Quality Procedure<sup>2</sup> 23°C (73°F) / 50% r.h.**Description**

SikaGlaze® IG-50 is a polyurethane based secondary edge sealant for insulating glass. Together with the primary sealant SikaGlaze® IG-5 PIB it forms a complete system for edge sealing of IG units. SikaGlaze® IG-50 has good adhesion to all substrates typically used in the insulating glass industry such as float glass, coated glasses and spacers. SikaGlaze® IG-50 is manufactured in accordance with ISO 9001.

**Product Benefits**

- Mercury free
- Low Argon permeation rate
- Low water vapour transmission
- Meets the requirements of EN 1279-2, -3, and -4
- Non-sagging

**Areas of Application**

SikaGlaze® IG-50 is designed for multiple pane insulating glass units. It can be processed manually or through a fully automated 2- component dispensing system. This product is suitable for professional experienced users only. Test with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

### Cure Mechanism

The curing of SikaGlaze® IG-50 A takes place by chemical reaction with either the liquid SikaGlaze® IG-50 B or SikaGlaze® IG-50 Paste B. Higher temperatures accelerate the curing whereas lower temperatures slow down the curing process.

### Chemical Resistance

Information regarding chemical resistance of SikaGlaze® IG-50 is available on request.

### Application Limits

SikaGlaze® IG-50 is compatible with SikaGlaze® IG-5 PIB. Most Sikasil® WT and Sikaflex® window bonding sealants are compatible with SikaGlaze® IG sealants. For specific information regarding compatibility between various Sikasil® and SikaGlaze® products please contact the Technical Service Department of Sika Industry. For weather sealing of IG units manufactured with SikaGlaze® IG-50 the use of Sikasil® WS-605 S is recommended.

All other sealants and adhesives have to be approved by Sika before using them in combination with SikaGlaze® IG-50. Where two or more different reactive sealants are used, allow the prior applied to cure completely before applying the next.

The compatibility of gaskets, backer rods, setting blocks, coatings of wood frames and other accessory materials with SikaGlaze® IG-50 must be tested in advance.

The above information is offered for general guidance only. Advice on specific applications will be given on request.

### Method of Application

The mixed sealant must appear homogeneous, free of air and reams. The maximum tolerance of the mixing ratio is  $\pm 10\%$ . The application temperature is between 10°C and 30°C. If a heated follower plate is used the temperature must not exceed 30°C.

SikaGlaze® IG-50 B (liquid) and SikaGlaze® IG-50 Paste B are moisture sensitive. Therefore exposure to air humidity has to be avoided.

The application time depends on several factors such as temperature, mixing process and setup. It is recommended to set the mixer open time alert at about 6 min. Tooling of the sealant is possible during open time only. Curing speed and adhesion build up is also related to ambient and substrate temperature.

By utilizing a freezer for the mixing units the reaction can be slowed down but not stopped completely.

SikaGlaze® IG-50 has good adhesion on glass and IG spacers made of aluminium, galvanised and stainless steel or plastics covered with a metal foil. Spacer bars based on non-metallic materials have to be tested prior to use.

Surfaces must be clean, dry and free from grease, oil and dust. It is further recommended to install a quality control system according to EN 1279, part 6 or similar.

The back filling of SikaGlaze® IG-50 on the spacer should have a height of at least 3 mm. Air entrapments have to be avoided.

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

### Removal

Uncured SikaGlaze® IG-50 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® Handclean Towel or a suitable industrial hand cleaner and water. Do not use solvents!

### Storage

Store the product under dry conditions at temperatures between 10°C and 25°C in original sealed containers. Do not expose SikaGlaze® IG-50 to frost or direct sun light.

### Packaging information

Component A	Drum	200 l
Component B (liquid)	Drum	200 l
	Pail	20 l
Component Paste B	Pail	20 l

### Value Bases

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.

### Health and Safety Information

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Material Safety Data Sheets 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.

Further information available at:  
[www.sika.ch](http://www.sika.ch)  
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