Sikasil® AS-65

Industrial silicone adhesive

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base	1-component silicone
Color (CQP001-1)	Black, white
Cure mechanism	Moisture-curing
Cure type	Oxime
Density (uncured)	1.41 kg/l
Non-sag properties (CQP061-4 / ISO 7390)	Good
Application temperature ambient	5 – 40 °C
Skin time (CQP019-1)	10 minutes [A]
Curing speed (CQP049-1)	(see diagram)
Shore A hardness (CQP023-1 / ISO 48-4)	54
Tensile strength (CQP036-1 / ISO 527)	2.4 MPa
100 % modulus (CQP036-1 / ISO 527)	1.4 MPa
Elongation at break (CQP036-1 / ISO 527)	280 %
Thermal resistance (CQP 513-1) 4 hours 1 hour	200 °C 220 °C
Service temperature	-40 – 120 °C
Shelf life (CQP016-1)	9 months [B]

CQP = Corporate Quality Procedure   A) 23 °C / 50 % r. h.   B) storage below 25 °C

DESCRIPTION
Sikasil® AS-65 is a 1-component, non-corrosive silicone adhesive. It adheres very well to common substrates in the photovoltaic industry.

PRODUCT BENEFITS
▪ Good mechanical properties
▪ Good adhesion to a wide variety of substrates
▪ Performance retention over a wide temperature range
▪ Long-term durability
▪ UL certified: UL94 HB

AREAS OF APPLICATION
Sikasil® AS-65 can be used for demanding industrial bonding and sealing applications. It is especially suited for frame and junction box bonding in the photovoltaic industry.
Common substrates are metals, particularly aluminum, glass, metal primers and paint coatings (2-C systems), ceramic materials, plastics and wood.
This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed ensuring adhesion and material compatibility.

CURE MECHANISM

Sikasil® AS-65 cures by reaction with atmospheric moisture. At low temperatures the water content of the air is generally lower and the curing reaction proceeds somewhat slower (see diagram 1).
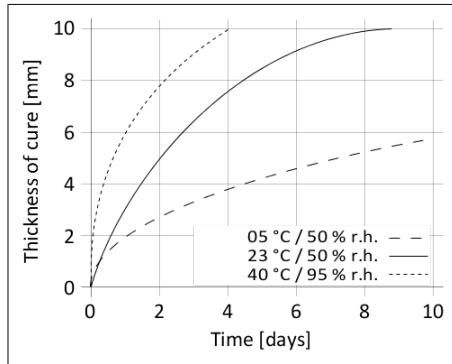

Diagram 1: Curing speed Sikasil® AS-65

METHOD OF APPLICATION

Surface preparation

Surfaces must be clean, dry and free from grease, oil and dust. Surface treatment depends on the specific nature of the substrates and is crucial for a long lasting bond.

Application

The optimum temperature for substrate and sealant is between 15 °C and 25 °C.
Sikasil® AS-65 can be processed with manual, 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.
Joints deeper than 15 mm must be avoided.

Tooling and finishing

Tooling and finishing must be carried out within the skin time of the sealant.
When tooling freshly applied Sikasil® AS-65 press the sealant to the joint flanks to get a good wetting of the bonding surface. No tooling agents to be used.

Removal

Uncured Sikasil® AS-65 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 have to be washed immediately using hand wipes such as Sika® Cleaner-350H cleaning towels or a suitable industrial hand cleaner and water.
Do not use solvents on skin.

Overpainting

Sikasil® AS-65 cannot be overpainted.

Application limits

To exclude materials influencing Sikasil® AS-65, all adjacent materials in direct and indirect contact have to be tested. Where two or more different reactive sealants are used, allow the first to cure completely before applying the next.
Sikasil® AS-65 may only be used for serial application after a detailed examination and written approval of the corresponding project details by Sika Industry.

FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Industry.
Copies of the following publications are available on request:
- Safety Data Sheets
- General Guidelines
  Sikasil® AS-Product Range

PACKAGING INFORMATION

Unipack	400 ml
	600 ml
Drum	270 kg

BASIS OF PRODUCT DATA

All technical data stated in this document 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 Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

DISCLAIMER

The information, and, in particular, the recommendations relating to the application and enduse 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.