

PRODUCT DATA SHEET

Sikasil® AS-785

FAST CURING AND STRUCTURAL ASSEMBLY SILICONE ADHESIVE

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

| Properties | Sikasil® AS-785 (A) | Sikasil® AS-785 (B) |
|---|----------------------------|-----------------------|
| Chemical base | 2-component silicone | |
| Color (CQP001-1) | White | Black |
| | mixed | Black |
| Cure mechanism | Polycondensation | |
| Cure type | Alkoxy | |
| Density (uncured) | 1.4 kg/l | 1.1 kg/l |
| | mixed | 1.4 kg/l |
| Mixing ratio | A:B by volume | 10:1 |
| | A:B by weight | 13:1 |
| Viscosity (CQP029-5 / ISO 3219) | at 0.89 s ⁻¹ | 1 200 Pa·s |
| | | 400 Pa·s |
| Consistency | Paste | |
| Application temperature | ambient | 5 – 40 °C |
| Snap time (CQP554-1) | 12 minutes ^{A, B} | |
| Tack free time (CQP019-3) | 40 minutes ^A | |
| Shore A hardness (CQP023-1 / ISO 7619-1) | 45 | |
| Tensile strength (CQP036-1 / ISO 527) | 2 MPa | |
| 100 % modulus (CQP036-1 / ISO 527) | 1.2 MPa | |
| Elongation at break (CQP036-1 / ISO 527) | 250 % | |
| Thermal resistance (CQP 513-1) | 4 hours | 190 °C |
| | 1 hour | 200 °C |
| Service temperature (CQP513-1) | -40 – 150 °C | |
| Shelf life (CQP016-1) | 15 months ^c | 9 months ^c |

CQP = Corporate Quality Procedure

^{A)} 23 °C / 50 % r. h.^{B)} The Snap time can increase add. 6 min. with component B at the end of shelf life^{c)} storage below 25 °C

DESCRIPTION

Sikasil® AS-785 is a fast curing structural 2-component industrial silicone adhesive and sealant. It is non-corrosive, has a very broad adhesion range as well as an outstanding long-term durability in harsh environment conditions.

PRODUCT BENEFITS

- Outstanding adhesion and mechanical performance under harsh environment conditions
- Excellent adhesion to a wide variety of substrates
- Very good mechanical properties
- Performance retention over a wide temperature range
- Long-term durability
- Low volatility
- Meets EOTA ETAG 002
- UL® certified: UL94 V-1, QQQW2 (-40 °C – 105 °C)

AREAS OF APPLICATION

Sikasil® AS-785 is especially designed for fast and/or automated bonding of structural adhesive joints. Especially for interior or exterior applications where a high mechanical performance under harsh conditions are required, like in appliances, solar and automotive.

Common substrates are metals, particularly aluminum, glass, metal primers and paint coatings (2-part systems), ceramic materials and plastics.

This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

CURE MECHANISM

Sikasil® AS-785 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 could lead to bubble formation and is therefore not allowed.

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.

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

Before processing Sikasil® AS-785 both components have to be mixed homogeneously and air-bubble-free in the correct ratio as indicated with an accuracy of $\pm 10\%$. Most commercially available metering and mixing equipment are suitable. For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Industry.

Consider that the B-component is moisture-sensitive and must therefore only be exposed briefly to air.

Joints must be properly dimensioned.

Tooling and finishing

Tooling and finishing must be carried out within the snap time of the adhesive. No tooling agents must be used.

Removal

Uncured Sikasil® AS-785 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 or a suitable industrial hand cleaner and water.

Do not use solvents on skin.

Application limits

To exclude materials influencing Sikasil® AS-785, all materials such as gaskets, setting blocks, sealants etc., in direct and indirect contact have to be approved by Sika in advance.

Where two or more different reactive sealants are used, allow the first to cure completely before applying the next.

Sikasil® AS-785 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
Bonding and Sealing with Sikasil® AS-Products

PACKAGING INFORMATION

Sikasil® AS-785 (A+B)

| | |
|------------------------|--------|
| Side by side cartridge | 490 ml |
|------------------------|--------|

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.

