BUILDING TRUST

PRODUCT DATA SHEET

Sikasil® AS-786

Fast curing and structural assembly silicone adhesive

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties		Sikasil® AS-786 (A)	Sikasil® AS-786 (B)
Chemical base		2-component silicone	
Color (CQP001-1)		Black	Opaque
	mixed	Black	
Cure mechanism		Polycondensation	
Cure type		Ethoxy	
Density (uncured)		1.30 kg/l	1.00 kg/l
	mixed	1.27 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}	1 000 Pa·s	300 Pa·s
Consistency		Paste	
Application temperature	ambient	5 – 40 °C	
Snap time (CQP554-1)		13 minutes [A]	
Tack free time (CQP019-3)		30 minutes [A]	
Shore A hardness (CQP023-1 / ISO 48-4)		35	
Tensile strength (CQP036-1 / ISO 527)		1.7 MPa	
100 % modulus (CQP036-1 / ISO 527)		0.8 MPa	
Elongation at break (CQP036-1 / ISO 527)		250 %	
Tensile lap-shear strength (CQP046-9 / ISO 4587)		1.0 MPa [B]	
Service temperature (CQP513-1)		-40 – 180 °C	
Shelf life		12 months [C]	9 months [C]

CQP = Corporate Quality Procedure

[A] 23 °C / 50 % r. h.

[B] adhesive layer 25 x 12 x 2 mm

[C] stored below 25 °C

DESCRIPTION

Sikasil® AS-786 is a fast curing structural 2-component industrial silicone adhesive and sealant. It is none corrosive, has a very broad adhesion range as well as long-term durability in harsh environment conditions. It allows for an adjustable mix ratio from 7:1 to 13:1 by volume to suit the production processes while maintaining its performance.

PRODUCT BENEFITS

- Very good adhesion and mechanical performance under harsh environment conditions
- Adjustable mixing ratio according required process times
- Adhesion to a wide variety of substrates
- Performance retention over a wide temperature range
- Constant mechanical properties over broad mixing ratio
- Allows fast handling of bonded parts
- Low volatility
- Methanol-free

AREAS OF APPLICATION

Sikasil® AS-786 is especially designed for fast and/or automated bonding of structural adhesive joints and for interior or exterior applications where a high mechanical performance under harsh conditions is required, like in appliances, solar or 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 ensuring adhesion and material compatibility.

CURE MECHANISM

Sikasil® AS-786 starts to cure immediately after mixing the 2-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

The optimum temperature for substrate and product is between 15 °C and 25 °C.
Before processing Sikasil® AS-786 both components have to be mixed homogeneously and air-bubble-free in the correct ratio as indicated with an accuracy of ±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.

Tooling and finishing

Tooling and finishing must be carried out within the snap time of the adhesive.
When tooling freshly applied Sikasil® AS-786, press the adhesive to the joint flanks to get a good wetting of the bonding surface. No tooling agents must be used.

Removal

Uncured Sikasil® AS-786 may be removed from tools and equipment with Sika® Remover-208 or another suitable solvent. Once cured, the material can only be removed mechanically.
Re-usable, usually metallic, static mixer can be cleaned with Sika® Mixer Cleaner.
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-786, 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 one.
Sikasil® AS-786 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 Guideline
  Bonding and Sealing with Sikasil® AS-Products

PACKAGING INFORMATION

Sikasil® AS-786 (A)

Pail	24 kg
Drum	240 kg

Sikasil® AS-786 (B)

Pail	18 kg

Sikasil® AS-786 (A+B)

Cartridge	490 ml
Mixer: Quadro MCQ 10-19T by medmix	

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.

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