

PRODUCT DATA SHEET

Sikasil® AS-790

ULTRA FAST CURING INDUSTRIAL ASSEMBLY SEALANT & ADHESIVE

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties		Sikasil® AS-790 (A)	Sikasil® AS-790 (B)
Chemical base		2-component silicone	
Color (CQP001-1)		White	Black
	mixed	Black	
Cure mechanism		Polycondensation	
Cure type		Neutral	
Density (uncured)		1.4 kg/l	1.1 kg/l
	mixed	1.3 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	600 Pa·s	500 Pa·s
Consistency		Paste	
Application temperature	ambient	5 – 35 °C	
Snap time (CQP554-1)		5 minutes ^A	
Tack free time (CQP019-3)		10 minutes ^A	
Shore A hardness (CQP023-1 / ISO 7619-1)		40	
Tensile strength (CQP036-1 / ISO 527)		1.6 MPa	
100 % modulus (CQP036-1 / ISO 527)		1 MPa	
12.5 % modulus (CQP036-1 / ISO 37)		0.3 MPa	
Elongation at break (CQP036-1 / ISO 527)		200 %	
Tear propagation resistance (CQP045-1 / ISO 34)		2.5 N/mm	
Thermal resistance (CQP 513-1)	4 hours	200 °C	
	1 hour	220 °C	
Service temperature (CQP513-1)		-40 – 150 °C	
Shelf life (CQP016-1)		12 months ^B	6 months ^B

CQP = Corporate Quality Procedure

^{A)} 23 °C / 50 % r. h.^{B)} storage below 25 °C

DESCRIPTION

Sikasil® AS-790 is a 2-component, non-corrosive, exceptionally fast-curing silicone sealant and adhesive designed for industrial processes.

PRODUCT BENEFITS

- Allows fast handling of bonded parts
- Excellent adhesion to many substrates
- Outstanding UV and weathering resistance
- Long-term durability
- Pumpable over long distances
- Low volatility

AREAS OF APPLICATION

Sikasil® AS-790 is designed for high demanding and fast processing industrial assembly and sealing applications. Typical application areas are in appliances 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.

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CURE MECHANISM

Sikasil® AS-790 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.

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

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-790 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-790 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.

Overpainting

Sikasil® AS-790 cannot be overpainted.

Application limits

To exclude materials influencing Sikasil® AS-790, 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-790 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 Sikasil® AS-Product Range

PACKAGING INFORMATION

Sikasil® AS-790 (A)

Pail	26 kg
Drum	260 kg

Sikasil® AS-790 (B)

Pail	20 kg
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Sikasil® AS-790 (A+B)

Side by side cartridge	490 ml
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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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