

PRODUCT DATA SHEET

SikaPower®-770

High-performance 2-component structural adhesive

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties	SikaPower®-770 (A)	SikaPower®-770 (B)
Chemical base	Epoxy	Amine
Color (CQP001-1)	Black	Grey
	Black	
Density	1.23 kg/l	1.28 kg/l
	mixed (calculated)	1.26 kg/l
Mixing ratio	by volume	100 : 100
	by weight	100 : 100
Consistency	Thixotropic paste	
Application temperature	15 – 35 °C	
Open time (CQP046-11 / ISO 4587)	60 minutes ^{A, B}	
Handling time (CQP046-11 / ISO 4587)	5.5 hours ^{A, B}	
Shore D hardness (CQP023-1 / ISO 868)	84 ^C	
Tensile strength (CQP543-1 / ISO 527)	30 MPa ^{A, D, E}	
E-Modulus (CQP543-1 / ISO 527)	1900 MPa ^{A, D, E}	
Elongation at break (CQP543-1 / ISO 527)	7 % ^{A, D, E}	
Tensile lap-shear strength (CQP046-9 / ISO 4587)	24 MPa ^{A, B, D}	
Service temperature (CQP513-2)	-40 – 100 °C	
Shelf life	12 months	

CQP = Corporate Quality Procedure

^C) cured for 2 hours at 80 °C^A) 23 °C / 50 % r.h.^D) cured for 16 hours at 70 °C^B) adhesive layer: 25 x 12.5 x 0.3 mm / on aluminium^E) specimen type 1A acc. to ISO 527

DESCRIPTION

SikaPower®-770 is a high-performance 2-component epoxy adhesive, which cures at room temperature.

It is suitable for bonding metallic or composite substrates.

PRODUCT BENEFITS

- Suitable for edgewise assemblies
- Long open time to cover and bond wide surfaces
- Good mechanical and thermal properties up to 100 °C
- High resistance to dynamic loads, including vibrations and impacts
- High durability, with resistance to aging and harsh environments.

AREAS OF APPLICATION

SikaPower®-770 is designed for high-performance bonding of metallic or composite parts in transportation and general industry.

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

SikaPower®-770 cures by chemical reaction of the two components at room temperature. The cure rate is accelerated at higher temperatures, e.g. using ovens or infrared lamps. The mechanical properties may be increased with higher curing temperature.

CHEMICAL RESISTANCE

In view of potential chemical or thermal exposure, it is required to conduct a project related testing.

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. All pre-treatment steps must be confirmed by preliminary tests on original substrates considering specific conditions in the assembly process.

Application

SikaPower®-770 is applied from 1:1 dual cartridge with adequate dispenser. The use of electric or pneumatic dispensers with piston-driven plungers is recommended. Extrude adhesive without mixer to equalize the filling levels. Attach the defined mixer and dispose of the first few cm of the bead before the application.

Removal

Uncured SikaPower®-770 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 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.

STORAGE CONDITIONS

SikaPower®-770 has to be kept between 15 °C and 25 °C in a dry place. Do not expose it to direct sunlight or frost. After opening of the packaging, the contents have to be protected against humidity.

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
- API: Mixer alternatives for cartridges

PACKAGING INFORMATION

SikaPower®-770 (A+B)

Dual cartridge	400 ml
Mixer: Turbo™ Bell Mixer 180AN-824	

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 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.

