

PRODUCT DATA SHEET

SikaPower®-880

Toughened and fast-curing 2-component structural adhesive

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties	SikaPower®-880 (A)	SikaPower®-880 (B)
Chemical base	Epoxy	Amine
Color (CQP001-1)	White	Grey
	mixed	Grey
Density	1.25 kg/l	1.26 kg/l
	mixed (calculated)	1.26 kg/l
Mixing ratio	by volume	100 : 100
	by weight	100 : 102
Viscosity (CQP029-4)	at 10 s ⁻¹	120 Pa·s ^A
		100 Pa·s ^A
Consistency	Thixotropic paste	
Application temperature	15 – 30 °C	
Open time (CQP046-11 / ISO 4587)	45 minutes ^{A, B}	
Handling time (CQP046-11 / ISO 4587)	5 hours ^{A, B}	
Shore D hardness (CQP023-1 / ISO 48-4)	70 ^C	
Tensile strength (CQP543-1 / ISO 527)	22 MPa ^{A, C}	
E-Modulus (CQP543-1 / ISO 527)	2 100 MPa ^{A, C}	
Elongation at break (CQP543-1 / ISO 527)	3 % ^{A, C}	
Tensile lap-shear strength (CQP046-9 / ISO 4587)	23 MPa ^{A, B, C}	
Glass transition temperature (CQP509-1 / ISO 6721)	77 °C ^C	
Shelf life	12 months ^D	

CQP = Corporate Quality Procedure

C) cured for 1 week at 23 °C

A) 23 °C / 50 % r.h.

D) stored between 10 and 30 °C

B) adhesive layer: 25 x 12.5 x 0.3 mm / on steel

DESCRIPTION

SikaPower®-880 is a thixotropic, fast curing, gap-filling 2-component epoxy adhesive, which cures at room temperature.

It is designed for use in structural joints, where toughness and high strength are required. SikaPower®-880 is particularly suitable for bonding metallic substrates, like steel and aluminium, as well as composite substrates, like GFRP and CFRP laminates. The adhesive has very good application properties and shows elevated heat resistance.

PRODUCT BENEFITS

- High strength and high resistance to fatigue and impacts
- Long open time
- Fast curing at room temperature
- Very good non-sag and application properties
- Contains glass beads of 0.3 mm to ensure optimal bonding thickness
- Does not contain solvents or PVC

AREAS OF APPLICATION

SikaPower®-880 is suitable for fast assembly bonding applications in transportation and general industry, especially if high toughness and strength is required. It can also be used for repair applications as well as in hybrid joints in combination with spot welding, riveting or clinching.

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

CURE MECHANISM

SikaPower®-880 cures by a fast chemical reaction of the two components at room temperature. The cure rate can be further accelerated at higher temperatures, e.g., using ovens or infrared lamps. The final glass transition temperature, as well as the tensile and shear strengths, 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®-880 is dispensed from 1:1 dual cartridges with adequate dispensers. The use of electric or pneumatic guns with piston-driven plungers is recommended. Extrude adhesive without mixer to equalize the filling levels. Attach the mixer and dispose of the first few cm of the bead before the application.

For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Industry.

Removal

Uncured SikaPower®-880 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 cleaning towels or a suitable industrial hand cleaner and water.

Do not use solvents on skin.

STORAGE CONDITIONS

SikaPower®-880 has to be kept between 10 °C and 30 °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
- ATI: Mixer alternatives for cartridges

PACKAGING INFORMATION

SikaPower®-880 (A+B)

Dual cartridge	400 ml
Mixer: Sulzer MixPac™ MFQ 08-24T	

SikaPower®-880 (A)

Pail	19 kg
Drum	225 kg

SikaPower®-880 (B)

Pail	19 kg
Drum	227 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 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.

PRODUCT DATA SHEET

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013106808800001000

Sika India Pvt. Ltd.
620, Diamond Harbour Road
Commercial Complex II
Kolkata - 700 034
West Bengal, India
Phone: +91 33 2447 2448
info.india@in.sika.com

