

PRODUCT DATA SHEET

Sikaflex®-250 DM-5

High modulus direct glazing adhesive with high initial grip

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base		Polyurethane
Color (CQP001-1)		Black
Cure mechanism		Moisture-curing
Density (uncured)		1.27 kg/l
Non-sag properties		Very good
Application temperature	adhesive ambient	40 – 60 °C 15 – 35 °C
Skin time (CQP019-4)		30 minutes ^A
Curing speed (CQP049-1)	at 24 hours	3 mm ^A
Shore A hardness (CQP023-1 / ISO 48-4)		70
Tensile strength (CQP036-1 / ISO 527)		7.0 MPa
Elongation at break (CQP036-1 / ISO 527)		300 %
Tear propagation resistance (CQP045-1 / ISO 34)		13.0 N/mm
Tensile lap-shear strength (CQP046-1 / ISO 4587)		4.0 MPa
Shear modulus (CQP081-1)	at 10 %	3.5 MPa
Insulation resistance (CQP079-2 / DIN IEC 60167)	at 10 V	2·10 ⁹ Ωcm
Shelf life	drum / pail cartridge	9 months ^B 9 months ^B

CQP = Corporate Quality Procedure

^A) 23 °C / 50 % r.h.^B) stored below 25 °C in unopened container
DESCRIPTION

Sikaflex®-250 DM-5 is a 1-component high modulus polyurethane direct glazing adhesive with good initial strength, which cures on exposure to atmospheric humidity. This product is developed for direct glazing in the automotive industry.

PRODUCT BENEFITS

- 1-component application
- High modulus
- With most automotive glass only one activation step required
- Primerless to many paints
- High initial grip
- No contact corrosion on aluminum
- Short cut-off string
- Good working characteristics

AREAS OF APPLICATION

Sikaflex®-250 DM-5 has been originally designed for automated and manual direct glazing applications. It is as well suited for permanent elastic assembly bonding applications in the automotive industry.

It bonds well to numerous substrates. Common substrates are pretreated ceramic frits and glasses with corresponding UV protection as well as cleaned e-coated and painted surfaces.

This product is suitable for experienced professional users only.

Tests with actual substrates and conditions have to be performed ensuring adhesion and material compatibility.

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Sikaflex®-250 DM-5

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CURE MECHANISM

Sikaflex®-250 DM-5 cures by reaction with atmospheric moisture. At low temperatures the water content of the air is generally lower and the curing reaction proceeds somewhat slower.

CHEMICAL RESISTANCE

Sikaflex®-250 DM-5 is generally resistant to fresh water, seawater, diluted acids and diluted caustic solutions; temporarily resistant to fuels, mineral oils, ethanol, vegetable and animal fats and oils; not resistant to organic acids, glycolic alcohol, concentrated mineral acids and caustic solutions or solvents.

METHOD OF APPLICATION

Surface preparation

Surfaces must be clean, dry and free from grease, oil, dust and contaminants. 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

Sikaflex®-250 DM-5 can be processed between 15 °C and 35 °C (ambient) but changes in reactivity and application properties have to be considered.

Consider that the viscosity will increase at low temperature. For easy application, condition the adhesive at ambient temperature prior to use.

To ensure a uniform thickness of the bondline it is recommended to apply the adhesive in form of a triangular bead (see figure 1).

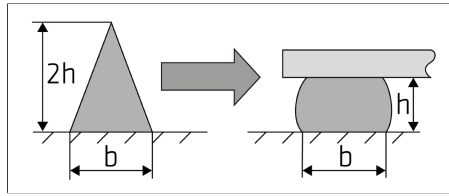


Figure 1: Recommended bead configuration

Sikaflex®-250 DM-5 is processed with a corresponding pump equipment.

The skin time is significantly shorter in hot and humid climate. Never join bonding parts if the adhesive has built a skin.

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

For transparent substrates, bond faces must be fully UV protected by suitable design or means.

Removal

Uncured Sikaflex®-250 DM-5 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.

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 1-component Sikaflex®

PACKAGING INFORMATION

Drum	195 l
Pail	23 l
Cartridge	300 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.