

## PRODUCT DATA SHEET

# Sikaflex®-250 DB-1R

High modulus adhesive for glass replacement

**TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)**

|  |                                 |
|--|---------------------------------|
| Chemical base                                    | Polyurethane                    |
| Color (CQP001-1)                                 | Black                           |
| Cure mechanism                                   | Moisture-curing                 |
| Density (uncured)                                | 1.25 kg/l                       |
| Non-sag properties (CQP061-1)                    | Very good                       |
| Application temperature                          | ambient 15 – 25 °C              |
| Skin time (CQP019-4)                             | 20 minutes <sup>A</sup>         |
| Curing speed (CQP049-1)                          | at 24 hours 3.5 mm <sup>A</sup> |
| Shrinkage (CQP014-1)                             | <1 %                            |
| Shore A hardness (CQP023-1 / ISO 48-4)           | 70                              |
| Tensile strength (CQP036-1 / ISO 527)            | 7 MPa                           |
| Elongation at break (CQP036-1 / ISO 527)         | 200 %                           |
| Tensile lap-shear strength (CQP046-1 / ISO 4587) | 4 MPa                           |
| Shear modulus (CQP081-1)                         | at 10 % 2.0 MPa                 |
| Insulation resistance (CQP079-2 / DIN IEC 60167) | at 1 V >1·10 <sup>9</sup> Ωcm   |
| Shelf life                                       | 12 months <sup>B</sup>          |

CQP = Corporate Quality Procedure

<sup>A</sup>) 23 °C / 50 % r.h.<sup>B</sup>) stored below 25 °C in unopened container
**DESCRIPTION**

Sikaflex®-250 DB-1R is a 1-component high modulus polyurethane direct glazing adhesive with good initial strength, which cures on exposure to atmospheric humidity.

Sikaflex®-250 DB-1R is manufactured in accordance with ISO 9001/14001 quality assurance system.

**PRODUCT BENEFITS**

- High modulus
- High initial grip
- Primerless to glass and ceramic frits
- Primerless to paint
- No contact corrosion to aluminum
- Suitable for use with integrated windshield aerals
- Short cut-off string
- Good working characteristics

**AREAS OF APPLICATION**

Sikaflex®-250 DB-1R is suitable for manual direct glazing as well as permanent elastic bonding of components in the automotive industry. Sikaflex®-250 DB-1R bonds well to numerous substrates. Common substrates are UV protected and pre-treated glass, pre-treated ceramic frit, e-coat 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.

## CURE MECHANISM

Sikaflex®-250 DB-1R 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 DB-1R is generally resistant to fresh water, seawater, diluted acids and diluted caustic solutions; temporarily resistant to fuels, ethanol, mineral oils, 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. Suggestions for surface preparation may be found on the current edition of the appropriate Sika® Pre-treatment Chart. Consider that these suggestions are based on experience and have in any case to be verified by tests on original substrates.

### Application

Sikaflex®-250 DB-1R can be processed between 15 °C and 25 °C (ambient and adhesive) 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).

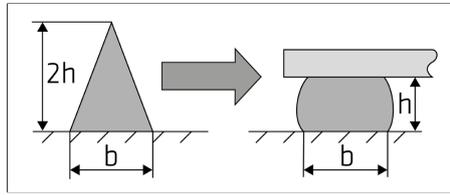


Figure 1: Recommended bead configuration

Sikaflex®-250 DB-1R can be processed with manual, pneumatic or electric driven piston guns as well as pump equipment.

The skin time is significantly shorter in hot and humid climate. The parts must always be installed within the open time. 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 DB-1R 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

|           |        |
|-----------|--------|
| 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.

## PRODUCT DATA SHEET

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