

BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex®-250 DP-2 PowerCure

Accelerated, high modulus adhesive for assembly application

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

| Chemical base | Polyurethane |
|--------------------------------------------------|------------------------------|
| Color (CQP001-1) | Black |
| Cure mechanism | Moisture-curing ^A |
| Density (uncured) | 1.27 kg/l |
| Application temperature ambient | 15 – 30 °C |
| Open time (CQP526-1) | 7 minutes ^B |
| Shore A hardness (CQP023-1 / ISO 48-4) | 70 |
| Tensile strength (CQP036-1 / ISO 527) | 7 MPa |
| Elongation at break (CQP036-1 / ISO 527) | 300 % |
| Tensile lap-shear strength (CQP046-1 / ISO 4587) | 4 MPa |
| Insulation resistance (CQP079-2 / ASTM D 257-99) | 10 ¹⁰ Ωcm |
| Shelf life (CQP016-1) | 9 months ^C |

CQP = Corporate Quality Procedure

A) provided by PowerCure

 $^{\mbox{\footnotesize B)}}$ 23 °C / 50 % r. h.

C) storage below 25 °C

DESCRIPTION

Sikaflex®-250 DP-2 PowerCure is an accelerated 1-component polyurethane adhesive suitable mainly for bonding applications in the automotive business.

It is made for Sika's PowerCure system and is applied using the Power Cure Dispenser.

PRODUCT BENEFITS

- Easy handling with the PowerCure Dispenser
- Accelerated curing
- High modulus
- Primerless to mainy paints

AREAS OF APPLICATION

Sikaflex®-250 DP-2 PowerCure is suitable for direct glazing applications and for permanent elastic bonding in the automotive industry in general.

Sikaflex®-250 DP-2 PowerCure bonds well to a variety of substrates. Common substrates are UV protected and pre-treated glass, pre-treated ceramic frit, e-coat and painted surfaces.

This product is for professional experienced users only. Tests with actual substrates at realistic conditions must be carried out before use to ensure adhesion and material compatibility.

CURE MECHANISM

Sikaflex®-250 DP-2 PowerCure cures by reaction with moisture provided by the accelerator paste and largely independent from atmospheric moisture. For typical strength build up data see table below.

| Time [h] | Lap-shear-strength [MPa] (CQP046-1) |
|----------|-------------------------------------|
| 2 | 0.3 |
| 4 | 1.2 |
| 8 | 2.1 |

Table 1: Strength build up applied at 25 °C ambient temperature

CHEMICAL RESISTANCE

Sikaflex®-250 DP-2 PowerCure 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

Substrates must be clean, dry and free of all contamination (grease, oil, dust and powdery deposits).

Additional pre-treatment as scuffing, cleaning, activation or use of primer might be necessary to guarantee good adhesion. Due to the diversity of possible substrates and pre-treatments, we recommend contacting our OEM Technical Service for advice on product use. All substrates must be tested before use under production conditions.

Application

Setup the PowerCure Dispenser according to the PowerCure User Manual. If the application is discontinued for more than 2 minutes, the mixer needs to be replaced.

The ideal temperature range of the substrate prior application and during the curing process of Sikaflex®-250 DP-2 PowerCure is 15 °C to 30 °C.

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

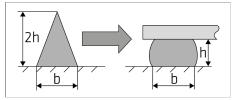


Figure 1: Recommended bead configuration

For transparent substrates, bond faces must be fully protected from both direct and reflected UV damage by suitable design or means.

Removal

Uncured Sikaflex®-250 DP-2 PowerCure 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®
- PowerCure User Manual and Quick Reference Guide

PACKAGING INFORMATION

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.









