Industry

Sikaflex®-250 DM-3

The high modulus, primerless to glass, direct glazing adhesive specially formulated for use with windshield aerials

Technical Product Data

Chemical base		1-C polyurethane
Color (CQP[1] 001-1)		Black
Cure mechanism		Moisture-curing
Density (uncured) (CQP 006-4)		1,27 kg/l
Non-sag properties		Good
Application temperature		40 - 60°C
Tack-free time[2] (CQP 019-1)		20 - 40 min.
Open time[2] (CQP 526-1)		20 min. approx.
Curing speed (CQP 049-1)		3 mm / in 1st day
Shrinkage (CQP 014-1)		<1% approx.
Shore A hardness (CQP 023-1 / ISO 868)		70 approx.
Tensile strength (CQP 036-1 / ISO 37)		8,0 N/mm² approx.
Elongation at break (CQP 036-1 / ISO 37)		300% approx.
Tear propagation resistance (CQP 045-1 / ISO 34)		12,0 N/mm approx.
Tensile lap-shear strength (CQP 046-1 / ISO 4587)		4,0 N/mm² approx.
Shear modulus (CQP 081-1)		3,0 N/mm² approx.
Volume resistivity (CQP 079-2 / ASTM D 257-99)		10^{10} Ωcm approx.
Shelf life (storage below 25°C) (CQP 016-1)	cartridge drum	12 months 6 months

[1] CQP = Corporate Quality Procedure [2] 23°C / 50% r.h.

Description

Sikaflex®-250 DM-3 is is a high modulus, primerless to glass, one-component polyurethane windscreen adhesive with good initial grip to prevent glass slip-down and cures on exposure to atmospheric moisture. Due to its excellent electrical properties, it can be used with windshield aerials.
Sikaflex®-250 DM-3 is manufactured in accordance with ISO 9001 / 14001 quality assurance system and the responsible care program.

Product Benefits

- 1C polyurethane
- Primerless to glass
- High modulus
- Non-conductive
- Antenna suitable
- Excellent working characteristics
- Short cut-off string
- Excellent initial grip properties
- Suitable for robot application and automated assembly process

Areas of Application

Sikaflex®-250 DM-3 is suitable for automated direct glazing application and permanent elastic bonding in the automotive industry.
Sikaflex®-250 DM-3 bonds well to a variety of substrates.
This product is suitable for professional experienced users only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

Cure Mechanism

Sikaflex®-250 DM-3 cures by reaction with atmospheric humidity. The curing speed depends on temperature and water content of the air. At lower temperatures the water content of the air is generally lower and the curing reaction proceeds more slowly.

Chemical Resistance

Sikaflex®-250 DM-3 is resistant to fresh water, sea water and aqueous cleaning agents as well as dilute acids and caustic solutions; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; not resistant to organic acids, alcohol, concentrated mineral acids and caustic solutions or paint thinners.
The above information is offered for general guidance only. Advice on specific applications will be given on request.

Method of Application

Surface preparation

Surfaces must be clean, dry and free from all traces of grease, oil and dust.
Additional surface treatment depends on the specific nature of the substrates and manufacturing process. Therefore all recommendations must be determined by preliminary tests discussed with Sika.

Application

Sikaflex®-250 DM-3 is dispensed straight from the standard shipping container or bulk drum by means of a pneumatic or hydraulic pump system. For advice on selecting and setting up a suitable pump system please contact the System Engineering Department of Sika Industry.

Cartridges: Heat the cartridge in the Sika® recommended oven for 1 hour and remove cartridge from oven. Pierce cartridge membrane peeling back completely and then place in cartridge gun. For satisfactory results the adhesive must be applied with a piston-type cartridge gun (hand-, compressed-air-, or battery-operated).

To ensure a uniform thickness of adhesive bead, we recommend that the adhesive be applied in the shape of a triangular bead (see illustration).
Containers should be stored in a cool place, preferably at temperatures below 25°C.
Approximately one day prior to application, assure that the container has been stored above 15°C, so the adhesive is dispensable.

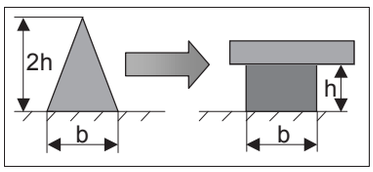

Figure 1: Recommended bead configuration

Removal

Uncured Sikaflex®-250 DM-3 may be removed from tools and equipment with Sika® Remover-208 or an-other suitable solvent. Once cured, the material can only be removed mechanically.
Hands and exposed skin should be washed immediately using Sika® Handclean Towel or a suitable industrial hand cleaner and water. Do not use solvents!

Further Information

Copies of the following publication are available on request:
- Material Safety Data Sheets

Packaging Information

Cartridge	300 ml
Drum	195 l

Value Bases

All technical data stated in this Product Data Sheet 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 should refer to the actual Material Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

Legal Notes

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