Industry

Sikaflex®-255 FC

Primerless direct glazing adhesive

Technical Product Data

Chemical base		1-C polyurethane
Colour (CQP[1]001-1)		Black
Cure mechanism		Humidity-curing
Density (uncured) (CQP 006-4)		1,2 kg/l approx.
Non-sag properties (CQP 061-1)		Good
Application temperature		+10°C to +35°C
Tack-free time[2] (CQP 019-1)		20 min. approx.
Curing speed (CQP 049-1)		(see diagram)
Shrinkage (CQP 014-1)		3% approx.
Shore A hardness (CQP 023-1 / ISO 868)		60 approx.
Tensile strength (CQP 036-1 / ISO 37)		6 N/mm^2 approx.
Elongation at break (CQP 036-1 / ISO 37)		400% approx.
Tear propagation resistance (CQP 045-1 / ISO 34)		12 N/mm approx.
Tensile-shear strength (CQP 046-1 / ISO 4587)		4 N/mm^2 approx.
Safe Drive-Away Time[2] (cars) according to FMVSS 212 / 208	with double side airbags without airbags	8 h 2 h
Electrical resistance (CQP 079-2 / ASTM D 257-99)		1 x 10^7 Ω cm approx.
Service temperature (CQP 513-1)		-40°C to +90°C
Shelf life (storage below 25°C) (CQP 016-1)		9 months

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

Description

Sikaflex®-255 FC is a high-performance, elastic, gap-filling, 1-c polyurethane adhesive that cures on exposure to atmospheric humidity to form a durable elastomer.
Sikaflex®-255 FC is manufactured in accordance with ISO 9001 / 14001 quality assurance system and with the responsible care program.

Product Benefits

- 1-C formulation
- Primerless
- Low odour
- Fast cure
- Short cut-off string
- Automotive OEM approved
- Tested and approved by the German TÜV road safety testing authority

Areas of Application

Sikaflex®-255 FC is suitable for direct glazing applications in both the automotive OEM and replacement markets.

Cure Mechanism

Sikaflex®-255 FC cures by reaction with atmospheric moisture. At low temperatures the water content of the air is lower and the curing reaction proceeds somewhat more slowly (see diagram).

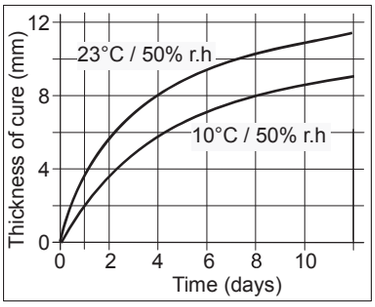


Diagram 1: Curing speed for Sikaflex®-255 FC

Chemical Resistance

Sikaflex®-255 FC is resistant to fresh water, seawater, dilute acids and caustic solutions; temporarily resistant to fuels, mineral oils, vegetable and animal oils; not resistant to organic acids, alcohol, concentrated mineral acids and caustic solutions or solvents.
The above information is offered for general guidance only. Advice on specific applications will be given on request.

Method of Application

Removal of old windows
Remove damaged glass in accordance with the vehicle manufacturer's instructions.

Surface preparation
Surfaces must be clean, dry and free from all traces of grease, oil and dust. The surfaces must be treated with a cleaning and activating agent or primed with the appropriate primer as follows:

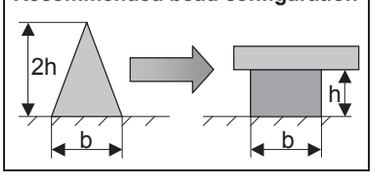
Glass without ceramic or without large cover trim and two part paint coats or metal primer	Sika® Aktivator + Sika® Primer-206 G+P
Glass with uniform and continuous opaque, mineral based ceramic frit	Sika® Aktivator
two part paint coats or metal primers (new painting less, than 25% of surface)	Sika® Aktivator
Old polyurethane direct glazing adhesive (cut face)	Sika® Aktivator

These instructions are only valid for automotive glass repair.

Advice on specific applications for buss, train and other commercial vehicles is available from the Technical Service Department of Sika Industry.

Application
Cartridges: Pierce cartridge membrane.
Unipacs: Place unipac in the application gun and snip off the closure clip.
Cut off the tip of the nozzle in accordance with the vehicle manufacturer's recommendations. For satisfactory results the adhesive must be applied with a piston-type cartridge gun (hand-operated or compressed air).
To ensure uniform thickness of adhesive bead, we recommend that the adhesive is applied in the form of a triangular bead (see illustration).
Do not apply below 10°C or above 35°C. The optimum temperature for substrate and adhesive is between 15°C and 25°C.
For advice on selecting and setting up a suitable pump system, please contact the System Engineering Department of Sika Industry.

Recommended bead configuration



Removal

Uncured Sikaflex®-255 FC can 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 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 publications are available on request:
- Material Safety Data Sheets
- Sika Primer Chart
- General guidelines for bonding and sealing with Sikaflex® products

Packaging Information

Cartridge	300 ml
Unipac	400 + 600 ml
Drum	195 l

Important

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Material Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

Note

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 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 proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

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