Sikaflex[®]-555

The primerless, isocyanate free windscreen adhesive which meets automotive OEM specification

Technical Product Data		
Chemical base		1-C polyurethane hybrid
Colour (CQP ¹ 001-1)		Black
Cure mechanism		Moisture curing
Density (uncured) (CQP 006-4)		1.2 kg/l approx.
Non-sag properties		Very good
Application temperature		10℃ - 35℃
Tack-free time ² (CQP 019-1)		25 min. approx.
Open time ² (CQP 526-1)		10 min. approx.
Curing speed (CQP 049-1)		(see diagram 1)
Shrinkage (CQP 014-1)		2% approx.
Shore A hardness (CQP 023-1 / ISO 868)		50 approx.
Tensile strength (CQP 036-1 / ISO 37)		6 N/mm ² approx.
Elongation at break (CQP 036-1 / ISO 37)		>300% approx.
Tear propagation resistance (CQP 045-1 / ISO 34)		15 N/mm approx.
Tensile lap-shear strength (CQP 046-1 / ISO 4587)		3.5 N/mm ² approx.
Safe Drive-Away Time ² (cars)	with double side airbags	6 h
according to FMVSS 212 / 208	without airbags	30 min.
Electrical resistance (CQP 079-2 / ASTM D 257-99)		7 x $10^6 \Omega$ cm approx.
Service temperature (CQP 513-1)	permanent	-40℃ to 90°C
Shelf life (storage below 25°C) (CQP 016-1)	cartridge, unipac, drum	9 months
	hobbock	6 months

ndustry

¹⁾ CQP = Corporate Quality Procedure

²⁾ 23℃ (73℉) / 50% r.h.

Description

Sikaflex[®]-555 is the world's first classification exempt (as defined under new EU Directive 25 APT) primerless windshield adhesive for original factory glazing and automotive glass repair that meets the high standards set by car manufacturers. Sikaflex[®]-555 is manufactured in

accordance with ISO 9001/14001 quality assurance system and with the responsible care program.

Product Benefits - Meets Automotive OEM

- specifications for cars
- Tested to US standards FMVSS
- 212/208
- 1-C formulation
- Normal modulus
- Primerless application
- No pre-heating required
- Short cut-off string
- Good non-sag properties
- Easy to apply with any standard piston-type cartridge gun (handoperated, battery operated or compressed-air)
- Solvent free
- Isocyanate free

Areas of Application

Sikaflex[®]-555 is designed for use in the factory glazing of new cars (OEM specification) and in automotive glass replacement. Coordinate the direct glazing of buses, trams and railways with our Technical Service Department of Sika Industry.

This product is to be used by professional experienced fitters only. If this product is used for other applications than direct glazing, trials must be carried out prior to use.



Cure Mechanism

Sikaflex[®]-555 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.



Diagram 1: Curing speed for Sikaflex[®]-555

Chemical Resistance

Sikaflex[®]-555 is <u>resistant</u> to fresh water, water based cleaning products.

<u>Temporarily resistant</u> to fuels, mineral oils.

Not resistant to acids, alcohol, 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 as follows:

Toughened glass with uniform and continuous opaque mineral based ceramic frit with light transmission* <0.1%	Sika [®] Aktivator + Sika [®] Primer 206G+P
Toughened glass with uniform and continuous opaque mineral based ceramic frit with light transmission* <0.1%	Sika [®] Hybrid Aktivator
Metal with paint primer or with partial new painting (<25% of total bonding area)	Sika [®] Hybrid Aktivator

 Metal painted with two part finish laquers or paints
 Sika® Hybrid Aktivator + Sika® Primer 206 G+P

 Old polyurethane direct glazing adhesive (cut face)
 Sika® Hybrid Aktivator

* Gretag 200D, visible range **For laminated glass this limit is 0.2%.

Advice on specific applications is available from the Technical Service Department of Sika Industry.

Application

<u>Cartridge</u>: Pierce cartridge membrane.

<u>Unipac</u>: 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 recommendation. To ensure uniform thickness of adhesive bead, we recommend that the adhesive be applied in the form of a triangular bead (see illustration).



Figure 1: Recommended bead configuration

Do not apply at temperatures 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, as well as on the techniques of pump operated application, please contact

the System Engineering Department of Sika Industry.

Tooling and finishing

Tooling and finishing must be carried out within the tack-free time of the sealant. We recommend the use of Sika[®] Tooling Agent N. Other finishing agents or lubricants must be tested for suitability / compatibility. **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
Hobbock	23
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 safetyrelated data.

Legal Notes

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 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 reque





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Further information available at: www.sika.co.uk www.sika.com

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