Technical Data Sheet
Version 08 / 2003

Sikaflex®-295 UV

Direct glazing adhesive for plastic glass in marine applications

Industry

Technical Product Data

Chemical base		1-C polyurethane
Colour (CQP[1] 001-1)		Black, white
Cure mechanism		Humidity-curing
Density (uncured) (CQP 006-4)		1,3 kg/l approx.
Non-sag properties		Good
Application temperature		+10°C to +35°C
Tack free time[2] (CQP 019-1)		60 min. approx.
Curing speed (CQP 049-1)		(see diagram)
Shrinkage (CQP 014-1)		1% approx.
Shore A-hardness (CQP 023-1 / ISO 868)		35 approx.
Tensile strength (CQP 020-3 / ISO 8339)		1,1 N/mm^2 approx.
Elongation at break (CQP 020-4 / ISO 8339)		500% approx
Tear propagation resistance (CQP 045-1 / ISO 34)		5 N/mm approx.
Glass transition temperature (CQP 509-1 / ISO 4663)		-45°C approx.
Movement accommodation factor		12,5%
Service temperature (CQP 513-1) Short term	permanent 4 hours 1 hour	-40°C to +90°C 120°C 150°C
Shelf life (storage below 25°C) (CQP 016-1)		12 months for cartridge 6 months for hobbock

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

Description

Sikaflex®-295 UV is a 1-c polyurethane adhesive of paste-like consistency that cures on exposure to atmospheric moisture to form a durable elastomer.
Sikaflex®-295 UV meets the require-ments set out by the International Maritime Organisation (IMO). Sikaflex®-295 UV is manufactured in accordance with the ISO 9001 / 14001 quality assurance system and with the responsible care program.

Product Benefits

- 1-C formulation
- Fast cure time
- Short cut-off string
- Approved for the OEM market
- Resistant to ageing and weathering
- Suitable for organic glasses

Areas of Application

Sikaflex®-295 UV has been specially developed for the marine industry, where it is used to bond and seal plastic glazing materials in boats and ships. Because of its excellent UV-resistance this product can also be used to seal joints in areas of severe exposure. Seek advice from our Technical Service before using Sikaflex®-295 UV on thermoformed plastics.
Suitable substrates include:

- Aluminum (bright or anodized)
- GRP (polyester resin)
- Stainless steel
- Timber
- 2-C coatings
- Plastic glazing materials (PC, PMMA)

Cure Mechanism

Sikaflex®-295 UV cures by reaction with atmospheric moisture. At low temperatures the water content of the air is lower and the curing reaction proceeds more slowly (see diagram).

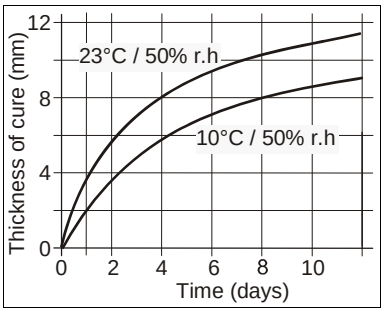


Diagram 1: Curing speed for Sikaflex®-295 UV

Chemical Resistance

Sikaflex®-295 UV is resistant to fresh water, seawater, aqueous, chlorine free cleaning solutions and sewage effluent as well as diluted 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, 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. As a rule the faces must be prepared in accordance with the instructions given in the current Sika® Primer Chart for Marine Applications.

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

Application

Cartridges: Pierce cartridge membrane.

Unipacs: Place unipac in the sealant gun and snip off the closure clip.

Cut off the tip of the nozzle to suit the joint and apply the adhesive with a suitable hand-operated or compressed-air gun.

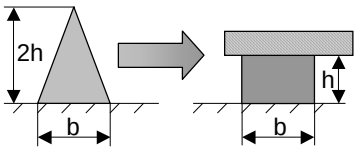
Once opened, packs should be used up within a relatively short space of time.

To ensure a uniform thickness of adhesive bead, we recommend that the adhesive is applied in the form of a triangular bead (see illustration). Correct joint design is essential when bonding plastic glazing materials and must take into account the special properties of these substrates.

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.

Recommended bead configuration



Tooling and finishing

Tooling and finishing must be carried out within the tack-free time of the adhesive. We recommend the use of Sika® Tooling Agent N. Other finishing agents or lubricants must be tested for suitability/ compatibility

Removal

Uncured Sikaflex®-295 UV 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 should be washed immediately using Sika® Handclean Towel or a suitable industrial hand cleaner and water. Do not use solvents!

Overpainting

Sikaflex®-295 UV can be overpainted when tack-free.

The paint must be tested for compatibility by carrying out preliminary trials. It should be understood that the hardness and film thickness of the paint may impair the elasticity of the adhesive and lead to cracking of the paint film.

Further Information

Copies of the following publications are available on request:

- Material Safety Data Sheets
- Sika Primer Chart Marine
- General guidelines for bonding and sealing with Sikaflex® products.
- Sika Marine Application Guide

Packaging Information

Cartridge	310 ml
Unipac	400 ml
Hobbock	23 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

Further information available at:
www.sika.com
www.sika.ch

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