

Sikaflex[®]-212 FC

Thixotropic sealant for buses, trucks and trailers

Technical Product Data

Chemical base	1-C polyurethane
Colour (CSQP ¹⁾ 001-1)	White
Cure mechanism	Humidity-curing
Density (uncured) (CSQP 006-4)	1,2 kg/l approx.
Non-sag properties	Good
Application temperature	5°C - 35°C
Tack free time ²⁾ (CSQP 019-1)	40 min. approx.
Curing speed (CSQP 049-1)	(see diagram)
Shrinkage (CSQP 014-1)	5% approx.
Shore A-hardness (CSQP 036-1 / ISO 868)	40 approx.
Tensile strength (CSQP 036-1 / ISO 37)	1,6 N/mm ²
Elongation at break (CSQP 036-1 / ISO 37)	500% approx.
Tear propagation resistance (CSQP 045-1 / ISO 34)	6 N/mm approx.
Glass transition temperature (CSQP 509-1 / ISO 4663)	-45°C approx.
Movement accommodation factor	12,5%
Service temperature (CSQP 513-1)	permanent -40°C to +90°C
Short term	4 hours 160°C
	1 hour 180°C
Shelf life (storage below 25°C) (CSQP 016-1)	12 months

¹⁾ CSQP = Corporate Sika Quality Procedures

²⁾ 23°C / 50% r.h.

Description

Sikaflex[®]-212 FC is a 1-c sealant of paste-like consistency. The product cures on exposure to atmospheric humidity to form a durable elastomer with a Shore A hardness (at 23°C) of approximately 40.

Sikaflex[®]-212 FC is manufactured in accordance with ISO 9001 / 14001 quality assurance system and with the responsible care program.

Product Benefits

- 1-C formulation
- Elastic
- Low odour
- Can be over painted
- Can be sanded
- Bonds well to a wide variety of substrates

Areas of Application

Sikaflex[®]-212 FC is a universal sealant which is suitable for most sealing applications in industrial commercial vehicle building. The product possesses excellent sealant properties and bonds well to all the materials commonly used in the commercial vehicle industry, e.g. metals, plastics, wood and glass. Sikaflex[®]-212 FC bonds to itself, and in its fully cured state can be lightly sanded and over-painted.



Cure Mechanism

Sikaflex®-212 FC reacts with atmospheric moisture to form an elastomer. At low temperatures the water content of the air is generally lower and the curing reaction proceeds somewhat more slowly.

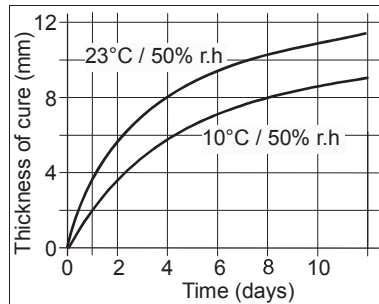


Diagram 1: Curing speed for Sikaflex®-212 FC

Chemical Resistance

Sikaflex®-212 FC is resistant to fresh water, seawater, limewater and sewage effluent, 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 solvents. 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. The contact surfaces must be cleaned with Sika® Remover 208 or Sika® Cleaner 205. For optimum sealant performance and long-term resistance to ageing, Sika offers a range of primers specifically formulated for different types of substrate (see Primer Chart).

Advice on specific applications 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 to suit joint width and apply the sealant into the joint with a suitable hand operated or compressed-air gun, taking care to avoid air entrapment. Once opened, packs should be used up within a relatively short time.

Do not apply at temperatures below 5°C or above 35°C. The optimum temperature for substrate and sealant 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

Removal

Uncured Sikaflex®-212 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 a Sika® Handclean Towel or a suitable industrial hand cleaner and water. Do not use solvents!

Overpainting

Sikaflex®-212 FC can be over-painted.

The paint must be tested for compatibility by carrying out preliminary trials. Sikaflex®-212 FC should not be exposed to baking temperatures until it has attained full cure. It should be understood that the hardness and film thickness of the paint may impair the elasticity of the sealant and lead to cracking of the paint film.

Further Information

Copies of the following publications are available on request:

- Material Safety Data Sheets
- General guidelines for bonding and sealing with Sikaflex® products

Packaging Information

Cartridge	310 ml
Unipac	400 + 600 ml
Hobbock	23 l
Drum	195 l

Important

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.

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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