

Sikaflex[®]-212 FC

Thixotropic sealant for buses, trucks and trailers

Technical Product Data

Chemical base	1-C polyurethane
Colour (CQP ¹ 001-1)	White
Cure mechanism	Moisture-curing
Density (uncured) (CQP 006-4)	1.2 kg/l approx.
Non-sag properties	Good
Application temperature	5 - 35°C (40 - 95°F)
Tack free time ² (CQP 019-1)	40 min. approx.
Curing speed (CQP 049-1)	(see diagram)
Shrinkage (CQP 014-1)	5% approx.
Shore A-hardness (CQP 036-1 / ISO 868)	40 approx.
Tensile strength (CQP 036-1 / ISO 37)	1.6 N/mm ²
Elongation at break (CQP 036-1 / ISO 37)	500% approx.
Tear propagation resistance (CQP 045-1 / ISO 34)	6 N/mm approx.
Glass transition temperature (CQP 509-1 / ISO 4663)	-45°C (-50°F) approx.
Service temperature (CQP 513-1)	-40 - 90°C (-40 - 195°F)
Short term	4 hours 160°C (320°F) 1 hour 180°C (355°F)
Shelf life (storage below 25°C) (CQP 016-1)	12 months

¹⁾ CQP= Corporate Quality Procedures

²⁾ 23°C / 50% r.h.

Description

Sikaflex[®]-212 FC is a 1 component sealant of paste-like consistency. The product cures on exposure to atmospheric humidity to form a durable elastomer.

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

Product Benefits

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

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 sealing properties and bonds well to most materials commonly used in the commercial vehicle industry, e.g. metals, plastics, wood and glass. Sikaflex[®]-212 FC bonds to itself, can be sanded and over-painted in its fully cured state.

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.

Industry



Cure Mechanism

Sikaflex®-212 FC cures by reaction with atmospheric moisture. At low temperatures the water content of the air is generally lower and the curing reaction proceeds somewhat slower (see diagram 1).

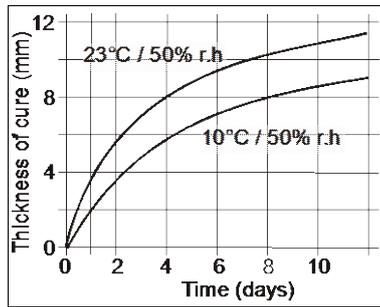


Diagram 1: Curing speed Sikaflex®-212 FC

Chemical Resistance

Sikaflex®-212 FC is resistant to fresh water, seawater, and proprietary aqueous cleaning agents; temporarily resistant to fuels, mineral oils, vegetable and animal fats; not resistant to organic acids, 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 grease, oil and dust. As a guideline for surface preparation the corresponding Sika Pre-Treatment Chart has to be used.

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

Application

Apply the sealant into the joint with a suitable hand operated or compressed-air gun, taking care to avoid air entrapment. 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, 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 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 towels or a suitable industrial hand cleaner and water. Do not use solvents!

Overpainting

Sikaflex®-212 FC can be over-painted after formation of a skin. In case the paint requires a bake process it may be necessary to wait for full cure. 1C-PUR and 2C-acrylic based paints are usually suitable. Not suitable are oil based paints. All paints have to be tested by carrying preliminary trials under manufacturing conditions. The elasticity of paints is lower than of polyurethanes. This could lead to cracking of the paint film in the joint area.

Further Information

Copies of the following publications are available on request:

- Safety Data Sheets
- General Guidelines Bonding and Sealing with Sikaflex® and SikaTack®
- Sika Pre-treatment Chart for 1-component Polyurethanes

Packaging Information

Cartridge	300 ml
Unipack	400 ml 600 ml
Pail	23 l
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 shall refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety-related 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 request.

Further information available at:
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