

Sikaflex®-529 AT

Sprayable sealant for vehicle bodies

Technical Product Data

Chemical base	Hybrid
Color (CQP ¹ 001-1)	Black, ochre
Cure mechanism	Humidity curing
Density (uncured) (CQP 006-4)	1.30 kg/l approx.
Application temperature	5 to 40°C
Skin time ² (CQP 019-1)	20 min. approx.
Open time ² (CQP 526-1)	15 min. approx.
Curing speed (CQP 049-1)	see diagram 1
Volume shrinkage (CQP 014-1)	3% approx.
Shore A-hardness (CQP 023-1 / ISO 868)	30 approx
Tensile strength (CQP 036-1 / ISO 37)	1.0 N/mm ² approx.
Elongation at break (CQP 036-1 / ISO 37)	200% approx.
Tear propagation resistance (CQP 045-1 / ISO 34)	2.0 N/mm approx.
Glass transition temperature (CQP 509-1 / ISO 4663)	-50°C approx.
Service temperature	-40°C to 80°C
Thermal resistance (CQP 513-1)	4h 120°C 1h 140°C
Shelf life (storage below 25°C) (CQP 016-1)	12 months

¹⁾ CQP = Corporate Quality Procedure

²⁾ 23°C (73°F) / 50% r.h.

Description

Sikaflex® -529 AT is a sprayable 1 – component hybrid sealant for seam sealing of factory provided original structures (surface area and beads) for vehicle body assemblies that cures on exposure to atmospheric humidity to form a durable elastomer. Sikaflex® -529 AT is based on Sika's silane terminated polymer technology and contains no isocyanate.

Sikaflex® -529 AT is manufactured in accordance with ISO 9001 / 14001 quality assurance system and the responsible care program.

Product Benefits

- Advanced hybrid technology
- Good adhesion to a wide variety of substrates without primer
- Fast curing
- Excellent working properties with no overspray and advanced non sag properties
- Reproduces factory provided original structures
- Sprayable, but also applicable as a bead or with a brush
- Over paintable with 2K water based paint systems wet on wet and after skin formation
- Good acoustic and mechanical damping properties
- Ageing and weather resistant
- Low odour
- Solvent and isocyanate free
- Silicone and PVC free

Areas of Application

Sikaflex® -529 AT is designed for use as a sprayable elastic sealant for seam sealing and lap joints in collision repair and vehicle body construction. Where applied, Sikaflex® -529 AT improves the resistance against stone chip and other attacks to the car body. Sikaflex® -529 AT adheres well to all the materials commonly used in body shops, e.g. metal primers and paint coatings, metals, painted metals and plastics.

This product is suitable for professional experienced users only. Test with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.



Cure Mechanism

Sikaflex® -529 AT cures by reaction with atmospheric humidity. At low temperatures the water content of the air is generally lower and the curing reaction proceeds more slowly.

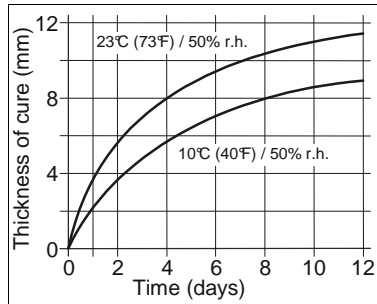


Diagram 1: Curing speed for Sikaflex®-529 AT

Chemical Resistance

Sikaflex® -529 AT is resistant to: fresh water, seawater and aqueous cleaning solutions. Temporarily resistant to: fuels, mineral oils, vegetable oils 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 grease, oil and dust. Where appropriate, the adhesion of the adhesive can be improved by treating the substrate with Sika® Aktivator-205. As a general rule substrates must be prepared in accordance with the instructions given in the current Sika® Pre-Treatment Chart.

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

Application

Cartridges: Cut off the tip of the cartridge and place it in the Sika® Spray Gun. This equipment should be operated in strict accordance with the manufacturer's instructions.

Unipacks: Place the unipack in the Sika® Jetflow Gun and snip off the

closure clip. Operating air pressure: minimum 5 bar. This equipment should be operated in strict accordance with the manufacturer's instructions.

Cut off the tip of the nozzle to suit joint width and apply the sealant into the joint. Once opened, unipacks should be used up within a relatively short time.

Do not apply at temperatures below 5°C or above 40°C (optimum temp 15°C to 25°C).

Tooling and finishing

Sikaflex® -529 AT can be tooled and finished with a paint brush or spatula. Tooling and finishing must be carried out within the open time of the sealant. We recommend the use of Sika® Tooling Agent N.

Removal

Uncured Sikaflex® -529 AT 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® -529 AT can be over painted with most common car paint systems (including water based).

Over painting can be done wet on wet and up to 72 hours after application of Sikaflex® -529 AT.

To achieve best product performance, allow sealant to cure prior to paint application and subsequent baking process. Adhesion on fully cured Sikaflex® -529 AT can be improved by treating the sealant with Sika® Aktivator-205 prior to painting. Please note that non flexible paint systems may impair the elasticity of the adhesive, impair joint movement and lead to cracking of the paint film.

PVC based paints and paints that dry by oxidation (oil or alkyd resin based) are generally not suitable for application over Sikaflex® -529 AT and 2K systems are preferred.

Further Information

Copies of the following publications are available on request:

- Material Safety Data Sheets
- Sika Pre-Treatment Chart
- General Guidelines Bonding and Sealing with Sikaflex® products

Packaging Information

Cartridge	290 ml
Unipack	300 ml

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 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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