

Technical Data Sheet

Sikaflex[®]-521 UV Long-life sealant

Technical product data:

Chemical base	one-part polyurethane-hybrid
Colour	black, white, grey
Density (DIN 53479) (uncured)	1,4 kg/l approx.
Stability (non-sag properties)	very good, with no tendency to sag or slump
Cure mechanism	moisture-curing
Tack-free time*	20 minutes approx.
Rate of cure*	3 mm per 24 hrs. approx.
Shrinkage (DIN 52451)	< 1%
Shore A hardness (DIN 53505)	30 approx.
Tensile strength (DIN 53504)	1,0 N/mm ² approx.
Elongation at break (DIN 53504)	> 200%
Glass transition temperature (DIN 53445)	-45°C approx.
Service temperature (continuous) short term (up to 8 hrs.)	-40°C to +90°C 120°C
Specific resistivity (DIN 53482)	10 ¹¹ Ω cm approx.
Movement accomodation factor	10%
Shelf life (stored below 25°C)	12 months

* = at 23°C and 50% relative humidity

Description:

Sikaflex[®]-521 UV is a multi-purpose non-sag elastic one-part sealant based on a polyurethane-silane compound, which cures on exposure to atmospheric moisture to form a durable elastomer.

Sikaflex[®]-521 UV is manufactured in accordance with the ISO 9001/14001 quality assurance system.

Cure mechanism:

Sikaflex[®]-521 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.

Product benefits:

- one-part formulation
- highly resistant to UV radiation
- resistant to ageing and weathering
- bonds well to a wide variety of substrates without the need for priming
- elastic
- no shrinkage
- low odour
- isocyanate-free
- solvent-free
- silicone-free

Areas of application:

Sikaflex[®]-521 UV bonds well to a wide variety of substrates and is suitable for making permanent elastic seals of high adhesive strength.

Suitable substrate materials are timber, metals, metal primers and paint coatings (two-part systems), ceramic materials and glass.

Seek manufacturer's advice before using on transparent materials that are prone to stress cracking.

Chemical resistance:

Sikaflex®-521 UV is resistant to UV radiation, fresh water, seawater, limewater, sewage effluent and proprietary aqueous cleaning agents; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; not resistant to organic acids, concentrated mineral acids, 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: The faces of the joint must be clean, dry and free from all traces of grease, oil, wax and dust. As a rule, the substrates must be prepared in accordance with the instructions given in the current Sika Primer Table.

Application: Pierce the cartridge membrane and peel back completely.

Place the unipac in the application gun and snip off the closure clip. Cut off the tip of the nozzle to suit joint width and gun 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 space of time.

To ensure satisfactory conditions for curing, 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 information and advice on the safe handling, storage and disposal of chemical products, users should refer to the current Safety Data Sheet containing physical, ecological, toxicological and other safety-related data for the appropriate type of substance.

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 products must be tested for suitability/compatibility prior to use.

Overpainting: Sikaflex®-521 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 sealant and lead to cracking of the paint film.

Removal:

Uncured Sikaflex®-521 UV may be removed from tools and equipment with Sika® Remover-208. Once cured, the material can only be removed mechanically.

Hands and exposed skin should be washed immediately using a suitable industrial hand cleanser and water. Do not use solvents!

Important:

If Sikaflex®-521 UV is used in combination with a PUR adhesive, the latter must be fully cured before seam sealing with Sikaflex®-521 UV.

Further information:

Copies of the following publications are available on request:

- Sika Primer Table
- Safety Data Sheet

Note:

Any recommendations concerning the use of this product that are given by us to the purchaser or user, whether by word of mouth or in writing, are given in good faith, based on our experience and on the present state of scientific knowledge and approved practice. Such recommendations are made without guarantee, and do not imply any additional contractual obligation arising out of the contract of sale. It is the responsibility of the purchaser to satisfy himself that our products are fit for the purpose for which he intends to use them, and to ensure that the proprietary rights of third parties are not thereby infringed. All orders are accepted subject our general terms of business. For further technical information and advice on specific applications, please contact our Industry Division.