

## Sikaflex<sup>®</sup>-227

### The fast automotive sealant

#### Technical Product Data

|   |   |
|---|---|
| Chemical base                                       | 1-C polyurethane                        |
| Colour (CQP <sup>1)</sup> 001-1)                    | Black, white                            |
| Cure mechanism                                      | Moisture-curing                         |
| Density (uncured) (CQP 006-4)                       | 1,3 kg/l approx.<br>depending on colour |
| Non-sag properties                                  | Good                                    |
| Application temperature                             | 5°C - 35°C                              |
| Tack free time <sup>2)</sup> (CQP 019-1)            | 40 min. approx.                         |
| Curing speed (CQP 049-1)                            | (see diagram)                           |
| Shrinkage (CQP 014-1)                               | 5% approx.                              |
| Shore A-hardness (CQP 023-1 / ISO 868)              | 40 approx.                              |
| Tensile strength (CQP 036-1 / ISO 37)               | 1,7 N/mm <sup>2</sup> approx.           |
| Elongation at break (CQP 036-1 / ISO 37)            | 600% approx.                            |
| Tear propagation resistance (CQP 045-1 / ISO 34)    | 6 N/mm approx.                          |
| Glass transition temperature (CQP 509-1 / ISO 4663) | -45°C approx.                           |
| Movement accommodation factor                       | 12,5%                                   |
| Service temperature (CQP 513-1)                     | -40°C to +90°C                          |
| Shelf life (storage below 25°C) (CQP 016-1)         | 9 months                                |

<sup>1)</sup> CQP= Corporate Quality Procedures <sup>2)</sup> 23°C / 50% r.h.

#### Description:

Sikaflex<sup>®</sup>-227 is a one-component polyurethane sealant designed for car body construction, curing on exposure to atmospheric moisture to form a durable elastomer.

Sikaflex<sup>®</sup>-227 is manufactured in accordance with the ISO 9001/14001 quality assurance system.

#### Product benefits:

- OEM approved quality
- Fast overpaintable
- Resistant to ageing
- Low odour
- Can be sanded
- Bonds well to a wide variety of substrates
- Short cut-off string
- Overhead work possible
- Fast curing
- Silicone free

#### Areas of application:

Sikaflex<sup>®</sup>-227 is suitable for sealing, seam sealing, simple bonding as well as for vibration reduction and sound deadening measures in crash body repair and car body construction. Suitable substrate materials are metal primers and paint coatings (two-part systems), metals, painted plastics and plastics. Seek manufacturer's advice before using on transparent and pigmented materials that are prone to stress cracking.



### Cure mechanism:

Sikaflex®-227 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).

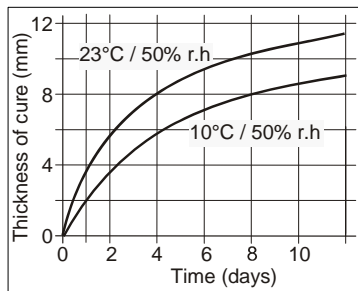


Diagram 1: Curing speed for Sikaflex®-227

### Chemical resistance:

Sikaflex®-227 is resistant to fresh water, aqueous cleaning 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.** The faces of the joint must be clean, dry and free from all traces of grease, oil and dust. The adhesion of the sealant can be improved by wiping the joint with Sika® Aktivator-205 (a cleaning and activating agent) and applying the appropriate Sika® Primer. As a rule, the substrates must be prepared in accordance with the instructions given in the current Sika Primer Chart.

**Application.** For cartridges: pierce the cartridge membrane and peel back completely. For unipacs: place 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 compressed-air or hand-operated gun, taking care to avoid air entrapment. Once opened, packs should be used up within a relatively short space of 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.

**Tooling and finishing.** Tooling and finishing must be carried out within the tack-free time of the sealant. Finishing agents or lubricants must be tested for suitability / compatibility.

**Overpainting.** Sikaflex®-227 can be overpainted when tack-free. The paint must be tested for compatibility by carrying out preliminary trials. Baked enamels should not be applied to Sikaflex®-227 until the sealant 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.

**Removal.** Uncured Sikaflex®-227 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!

### Further information:

Copies of the following publications are available on request:

- Sika Primer Chart
- Safety Data Sheet
- General guidelines for bonding and sealing with Sikaflex® products

### Packaging information:

|           |        |
|-----------|--------|
| Cartridge | 310 ml |
| Unipac    | 200 ml |

### Important:

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.

### 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 Australian version of the Product Data Sheet for the product concerned, copies of which will be supplied on request.

