

# Sikaflex®-292

## Structural adhesive for marine application

### Technical Product Data

Chemical base	1-C polyurethane	
Colour (CQP <sup>1)</sup> 001-1)	White	
Density (uncured) (CQP 006-4)	1.2 kg/L approx.	
Non-sag properties (CQP 061-1)	Very good	
Cure mechanism	Humidity-curing	
Tack-free time <sup>2)</sup> (CQP 019-1)	40 min. approx.	
Curing speed (CQP 049-1)	See diagram	
Shrinkage (CQP 014-1)	6% approx.	
Shore A hardness (CQP 023-1 / ISO 868)	55 approx.	
Elongation at break (CQP 036-1 / ISO 37)	> 300% approx.	
Tensile strength (CQP 036-1 / ISO 37)	4 N/mm <sup>2</sup> approx.	
Tear propagation resistance (CQP 045-1 / ISO 34)	9 N/mm approx.	
Tensile lap-shear strength (CQP 046-1 / ISO 4587)	2.5 N/mm <sup>2</sup> approx.	
Glass transition temperature (CQP 509-1 / ISO 4663)	-40°C approx.	
Volume resistivity (CQP 079-2 / ASTM D 257-99)	5 x 10 <sup>9</sup> Ω cm approx.	
Application temperature	10°C - 35°C	
Service temperature (CQP 513-1)	permanent	-40°C to 90°C
Short term	4 hours	130°C
	1 hour	150°C
Shelf life (storage below 25°C) (CQP 016-1)	12 months	

<sup>1)</sup> CQP = Corporate Sika Quality Procedures <sup>2)</sup> At 23°C and 50% relative humidity

### Description

Sikaflex®-292 is a non-sag 1-C polyurethane adhesive cures on exposure to atmospheric moisture to form a durable elastomer.

Sikaflex®-292 exhibits excellent adhesive properties and a high degree of mechanical strength.

Sikaflex®-292 meets the requirements set out by the International Maritime Organisation (IMO). Sikaflex®-292 is manufactured in accordance with the ISO 9001/ 14001 quality assurance system.

### Product Benefits

- 1-C formulation
- Elastic
- Can be overpainted
- Good gap-filling properties
- Capable of withstanding high dynamic stresses
- Vibration-damping
- Non-corrosive
- Electrically non-conductive
- Bonds well to a wide variety of substrates

### Areas of Application

Sikaflex®-292 is suitable for structural joints which will be subjected to high dynamic stresses. Suitable metals, particularly aluminium (including anodized finishes), metal primers and paint coatings (2-C systems), or ceramic materials, plastics such as GRP (unsaturated polyester resin), ABS, etc. Clear plastics and mineral glass should not be bonded with Sikaflex®-292.

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.

Industry



## Cure Mechanism

Sikaflex®-292 cures by reaction with atmospheric moisture. At low temperature the water content of the air is generally lower and the curing reaction proceeds slower (see diagram).

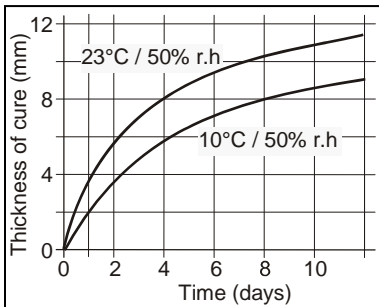


Diagram 1: Curing speed for Sikaflex®-292

## Chemical Resistance

Sikaflex®-292 is resistant to fresh water, seawater, limewater, sewage effluent, 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. As a rule the surfaces must be prepared in accordance with the instructions given in the current edition of the Sika® Primer Chart for Marine applications.

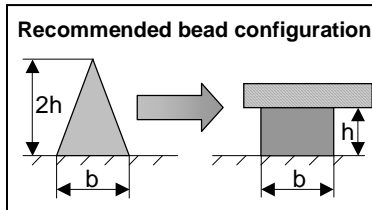
Advice on specific applications is available from the technical service department of Sika Canada.

### Application

Cartridges: Pierce cartridge membrane.

Sausages: Place sausage in the application gun and snip off the closure clip.

Cut off the tip of the nozzle. To ensure uniform thickness of adhesive when compressed, we recommend to apply the adhesive in the form of a triangular bead (see illustration).



Once opened, packs should be used up within a relatively short space of time.

Do not apply at temperatures below 10°C or above 35°C. The optimum temperature for substrate and adhesive is between 15°C and 25°C. For cartridge application we recommend the use of a compressed-air piston type cartridge gun.

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 Canada.

Tooling and finishing must be carried out within the tack-free time of the adhesive. We recommend the use of Sika® Tooling Agent N. Other finishing agents or lubricants must be tested for suitability / compatibility.

### Clean up

Uncured Sikaflex®-292 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 Sika® Hand Cleaner or a suitable industrial hand cleanser and water. Do not use solvents!

### Overpainting

Sikaflex®-292 can be overpainted when tack-free. The paint must be tested for compatibility by carrying out preliminary trials. Sikaflex®-292 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 adhesive and lead to cracking of the paint film.

## Further Information

Copies of the following publications are available on request:

- Material Safety Data Sheets
- Sika Primer Chart
- Sika Marine Application Guide

## Packaging Information

Cartridge	300 mL
Sausage	600 mL
Pail	23 L

## Value Basis

All technical data stated in this Product Data Sheet and laboratory test based. Current measured values may vary due to factors beyond our control.

## Health and Safety Information

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

All Product Data Sheets and Material Safety Data Sheets are also available on our web site.

## 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, within their shelf life. 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 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 Product Data Sheet for the product concerned, copies of which will be supplied on request or can be accessed in the Internet.

Further information available at:  
[www.sika.ca](http://www.sika.ca)

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