

Sikaflex® -290i DC

Weather resistant deck caulking sealant

Technical Product Data

Chemical base	1-C polyurethane	
Colour (CQP ¹ 001-1)	Black	
Cure mechanism	Moisture-curing	
Density (uncured) (CQP 006-4)	1.3 kg/l approx.	
Non-sag properties	Thixotropic, non-sagging	
Application temperature	ambient	10 - 35°C
Tack free time ² (CQP 019-1)	90 min. approx.	
Curing speed (CQP 049-1)	(see diagram)	
Shrinkage (CQP 014-1)	1% approx.	
Shore A-hardness (CQP 023-1 / ISO 868)	40 approx.	
Tensile strength (CQP 036-1 / ISO 8339)	3.5 MPa approx.	
Elongation at break (CQP 036-1 / ISO 8339)	700% approx.	
Tear propagation resistance (CQP 045-1 / ISO 34)	9 N/mm approx.	
Service temperature (CQP 513-1)	-40 - 90°C (-40 - 195°F)	
Shelf life (storage below 25°C) (CQP 016-1)	cartridge / unipack pail / drum	12 months 9 months

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

Description

Sikaflex®-290i DC is a 1-C weathering resistant polyurethane for joint sealing. It is specially formulated for caulking joints in traditional timber marine decking. The sealing compound cures with atmospheric moisture to form a flexible elastomer which can be sanded.

Sikaflex®-290i DC meets the low spread of flame requirements set out by the International Maritime Organisation (IMO).

Sikaflex®-290i DC is manufactured in accordance with the ISO 9001 / 14001 quality assurance system and with the responsible care program.

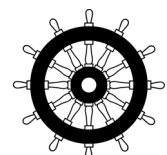
Product Benefits

- 1-C formulation
- Non-corrosive
- Sandable
- Excellent weathering resistance
- Resistant to seawater and fresh water
- Easy workability
- Solvent free and very low VOC

Areas of Application

Sikaflex®-290i DC is used exclusively for caulking joints in traditional timber decks for boat- and yacht construction.

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



Cure Mechanism

Sikaflex®-290i DC cures by reaction with atmospheric humidity. At low temperatures the water content of the air is generally lower and the curing reaction proceeds somewhat slower (see diagram 1).

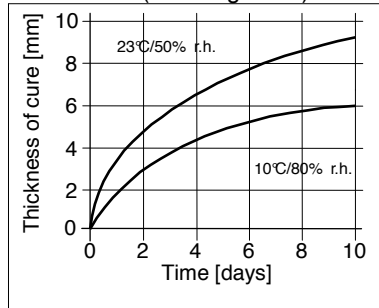


Diagram 1: Curing speed Sikaflex®-290i DC

Chemical Resistance

Sikaflex®-290i offers long-term resistance 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 rule, the substrates must be prepared in accordance with the instructions given in the current Sika Pre-Treatment Chart for Marine Applications.

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

Application

Cut off the tip of the nozzle to suit joint width and apply the sealant into the joint with a suitable hand operated or compressed-air gun, taking care to avoid air entrapment.

The optimum temperature for substrate and sealant is between 15°C and 25°C.

For advice on selecting and setting up suitable pump systems contact

the System Engineering Department of Sika Industry.

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

Removal

Uncured Sikaflex®-290i DC 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® Handclean Towel or a suitable industrial hand cleanser and water. Do not use solvents!

Sanding

Sikaflex®-290i DC is ready for sanding dependent on climate condition (see diagram 1). For further information consult the Sika Marine Application Guide.

Overpainting

It is generally not recommended that a finish such as a paint or varnish is applied to an exterior teak deck as these contain solvents or plasticisers that can adversely affect the cured Sikaflex®-290iDC or the drying of the film.

Varnishes or paints do not often exhibit the flexible characteristics of the caulk which could lead to unsightly cracks in the finish.

Any paint or varnish used must be tested for compatibility by carrying out preliminary trials on the fully cured sealant.

One pack paints or paints that dry by oxidation (oil or alkyd resin based) are generally not suitable for application over Sikaflex®-290iDC and two pack paint systems are preferred.

Further Information

Copies of the following publications are available on request:

- Material Safety Data Sheet
- Sika Pre-Treatment Chart for Marine Applications
- Sika Marine Application Guide
- General Guidelines Bonding and Sealing with Sikaflex®

Packaging Information

Cartridge	300 ml
	400 ml
Unipack	600 ml
	1000 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 Material Safety Data Sheet 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:
www.sika.co.uk
www.sika.com

Sika Limited
Business Unit Industry
Watchmead, Welwyn Garden City
Herts, AL7 1BQ
United Kingdom
Tel. +44 (0)1707 394444

