

PRODUCT DATA SHEET

Sikafloor® Marine-590

IMO approved self-levelling aliphatic 2-component polyurethane decorative resin

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties	Sikafloor® Marine-590 (A)	Sikafloor® Marine-590 (B)
Chemical base	Polyurethane	Isocyanate
Color (CQP001-1)	Colored	Transparent
	mixed	Various colors available (see color design chart)
Density	mixed	1.2 kg/l
		1.2 kg/l
Solid content	100 %	
Mixing ratio	by weight	75 : 25
Application temperature	substrate / climate	15 – 30 °C ^{A, B}
Shore A hardness (CQP023-1 / ISO 48-4)	84	
Tensile strength (DIN 53504)	8 MPa	
Elongation at break (DIN 53504)	66 %	
Pot-life	10 °C	120 minutes
	20 °C	90 minutes
	30 °C	45 minutes
Shelf life	9 months ^C	12 months ^C

CQP = Corporate Quality Procedure ^{A)} Substrates must be 3 °C above the dew point^{B)} max. 80 % r.h.^{C)} stored in sealed container in up-right position in a dry place between 5 and 30 °C, protected from direct sunlight

DESCRIPTION

Sikafloor® Marine-590 is a self-levelling 2-component polyurethane decorative floor resin, part of the Sikafloor® Marine Deco Comfort system for interior use and Sikafloor® Marine Deco Teak system for interior and exterior use.

Sikafloor® Marine-590 has been tested according to FTP Code system and approved according the IMO Marine Equipment Directives.

PRODUCT BENEFITS

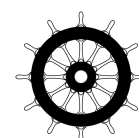
- Very UV stable (non yellowing)
- Decorative designs solutions
- IMO approved
- Very low VOC emission
- Solvent-free (ISO 16001-6)
- Permanently elastic

AREAS OF APPLICATION

Sikafloor® Marine-590 is designed as a component of the Sikafloor® Marine Deco systems. It is designed for mechanical resistant internal flooring in ship and boat construction and as final compound in the Sikafloor Marine Deco Teak systems for interior and exterior use.

Sikafloor® Marine-590 is IMO approved as per the corresponding Application Manual.

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



CURE MECHANISM

The curing of Sikafloor® Marine-590 takes place by a chemical reaction of the two components.

Higher temperatures speed up and lower temperatures slow down the curing process.

CHEMICAL RESISTANCE

For advice on chemical resistance contact the Technical Department of Sika Industry.

METHOD OF APPLICATION

Surface preparation

Sikafloor® Marine-590 is installed on top of the primary deck covering.

All dust, loose and friable material must be completely removed from the surface before application of Sikafloor® Marine-590. The application area must be protected against weather to fulfill referenced substrate and climatic conditions.

If IMO is required, get in contact with Sika to choose an appropriate combination of the Sika Marine-Deco System.

Mixing process

Prior to mixing both components, stir part A with a proper mixing paddle. Add part B and mix continuously for 3 minutes until a uniform mix has been achieved. To ensure an homogenous mixture pour material into another container and mix again for at least 1 minute.

Mix with mixing paddles not higher than 300 rpm's to minimize air entrapment.

For special areas (i.e. sloped areas) it may be required to use quartz sand or Sika® Extender T.

Application

For deeper sections (e.g. unevenness), it might be necessary to pre-level these in advance and let it cure first before finishing. Always consider the pot life to keep a wet edge. Sikafloor® Marine-590 is poured and spread evenly by means of a notched trowel or pin-rake. In critical areas a spike roller can be used to improve levelling.

Prior to application, always consult the most current corresponding Application Manual.

Curing

Indications regarding curing details see table below.

Temperature	Foot traffic	Light traffic ^A	Full cure
10 °C	30 hours	48 hours	6 days
20 °C	16 hours	24 hours	4 days
30 °C	12 hours	18 hours	3 days

A) food trolleys and light rolling equipment on soft wheels

Removal

Uncured Sikafloor® Marine-590 can be removed from tools and equipment with Sika® Colma Cleaner or another suitable solvent. Once cured, the material can only be removed mechanically. Hands and exposed skin shall be washed immediately using hand wipes such as Sika® Cleaner-350H or a suitable industrial hand cleaner and water. Do not use solvents on skin.

Application limits

Freshly applied Sikafloor® Marine-590 must be protected from damp, condensation and water for at least 5 days. Uncured material reacts in contact with water (foaming). During application, care must be taken that no drops of sweat get onto the fresh Sikafloor® Marine-590 coating (wear sweat bands). Refer to corresponding Application Manual.

STORAGE CONDITIONS

Both components of Sikafloor® Marine-590 have to be kept between 5 °C and 30 °C in a dry place. Do not expose it to direct sunlight. After opening of the packaging, the contents need to be protected against moisture. Minimum temperature during transportation is 5 °C.

FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Industry.

Copies of the following publications are available on request:

- Safety Data Sheets
- Application Manual
- Sikafloor® Marine-590

PACKAGING INFORMATION

Sikafloor® Marine-590 (A)

Container	15 kg
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Sikafloor® Marine-590 (B)

Container	5 kg
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BASIS OF PRODUCT DATA

All technical data stated in this document 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 Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

DISCLAIMER

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.

PRODUCT DATA SHEET

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