

## PRODUCT DATA SHEET

# Sikafloor® Marine-18

Primary deck covering mortar for interior decks

**TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)**

<b>Chemical base</b>	Polymer modified cement mortar
<b>Color</b>	Grey
<b>Cure mechanism</b>	Hydraulic
<b>Density</b>	mixed 1.9 kg/l cured 1.8 kg/l
<b>Mixing ratio</b>	per 25 kg bag 2.8 – 3.3 liters
<b>Substrate temperature</b>	5 – 30 °C
<b>Application thickness</b>	5 – 25 mm
<b>Coverage</b>	per 25 kg bag at layer thickness 1 mm 14 m <sup>2</sup>
<b>Working time (CQP599-9)</b>	30 minutes <sup>A</sup>
<b>Ready to walk on (CQP600-3)</b>	depending on humidity and ventilation 24 hours <sup>A</sup>
<b>Compressive strength (CQP599-2)</b>	18 MPa <sup>B</sup>
<b>Flexural strength (CQP599-1)</b>	8 MPa <sup>B</sup>
<b>Modulus of elasticity in compression (CQP599-6 / EN 13412)</b>	8 GPa <sup>B</sup>
<b>Linear shrinkage (CQP599-5)</b>	0.08 % <sup>B</sup>
<b>Shelf life</b>	12 months <sup>C</sup>

CQP = Corporate Quality Procedure

<sup>A)</sup> 23 °C / 50 % r. h.<sup>B)</sup> after 28 days<sup>C)</sup> stored in a dry, cool place below 25 °C
**DESCRIPTION**

Sikafloor® Marine-18 is a polymer modified cement based mortar used as a primary deck covering or as a constrained layer in the Sikafloor® Marine visco-elastic Systems. Sikafloor® Marine-18 is tested according to FTP Code system and approved according to the IMO Marine Equipment Directives.

**PRODUCT BENEFITS**

- Heavy duty and very flexible
- Suitable for sloped surfaces
- Non combustible
- Easily applicable leveling mortar
- Low E-Modulus
- One component, ready to mix
- Can be pumped

**AREAS OF APPLICATION**

Sikafloor® Marine-18 is applied on interior wet and dry accommodation areas, to level the surface prior to the application of deck finishing materials such as: carpets, tiles, parquet, rubber and vinyl. Sikafloor® Marine-18 is also part of the visco-elastic systems Sikafloor® Marine PK-90 N and Sikafloor® Marine VEM systems. This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed ensuring adhesion and material compatibility.

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## CURE MECHANISM

Sikafloor® Marine-18 cures by way of hydraulic curing.

## METHOD OF APPLICATION

### Surface preparation

For leveling applications, the surface has to be clean, free from dust, grease, oils and other substances, which may impair adhesion. Rust has to be removed with a steel brush or other appropriate means, followed by vacuum cleaning.

The surface has to be primed with Sikafloor® Marine Primer C using a long hair roller. After drying of the Sikafloor® Marine Primer C, Sikafloor® Marine-18 may be applied. For use in combination with Sikafloor® Marine PU-Red the application can be executed without primer.

Sikafloor® Marine-18 applications on aluminum or zinc rich shop primer coated decks, require a tie coat of SikaCor® ZP Primer or another suitable tie coat prior the priming step with Sikafloor® Marine Primer-C.

For wet areas the surface has to be treated with a water resistant membrane (e.g. Sikafloor® Marine Elastic).

Before application of vinyl and carpet coverings, ensure that a thin self levelling mortar such as Sikafloor® Marine 100 is applied to obtain an even floor.

### Mixing process

One bag of Sikafloor® Marine-18 is mixed with 2.8 to 3.3 liters cold potable water. The mixing time with a drilling machine and proper mixing paddles is approx. 5 minutes (not higher than 400 rpm's).

Ensure the powder is mixed completely (bottom and side walls of the bucket). For larger amounts, it may be mixed with a cement mixer. In any case, ensure a homogenous mortar is obtained before application.

### Application

Apply the mortar with a steel board or a straight edge.

Sikafloor® Marine-18 has to be applied within 20 minutes after mixing. At temperatures above 30 °C the open time will be reduced to 10 minutes or less.

For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Industry.

### Curing

After application, the finished areas have to be protected against direct heat (e.g. cutting or welding from beneath), sunlight and draught during the curing process for at least 12 hours.

Before Sikafloor® Marine-18 is covered with dense materials such as vinyl, epoxy coatings, etc., ensure that the remaining moisture level is below 4 %.

Test procedure to determine the dryness (according ASTM D 4263): put a PE-plastic foil 1 m x 1 m on the surface of the applied mortar floor tape the perimeter and leave for one day. The curing is complete if there is no water condensation on the foil or a visible color difference between covered and uncovered surface.

### Removal

Excess material can best be removed before curing with a trowel wipe or water.

Fresh Sikafloor® Marine-18 may be removed from tools and equipment with water. Once cured, the material can only be removed mechanically.

Exposed hands and skin shall be washed immediately with water. Use a suitable skin protection hand cream.

### 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 Sheet
- Application Manual  
Sikafloor® Marine-18

### PACKAGING INFORMATION

Bag	25 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 enduse 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.

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