

# SYSTEM DATA SHEET

## Sikafloor® MultiDur ES-31

SMOOTH UNICOLOUR EPOXY FLOOR COVERING WITH IMPROVED CHEMICAL AND MECHANICAL RESISTANCE FOR FLOORING APPLICATIONS

### DESCRIPTION

Sikafloor® MultiDur ES-31 is a smooth, coloured epoxy floor covering with high chemical and mechanical resistance for flooring applications

### USES

Sikafloor® MultiDur ES-31 may only be used by experienced professionals.

- Suitable for concrete and screed surfaces in areas with high chemical and mechanical exposures.
- Production and processing areas in food industry and automotive industry

### CHARACTERISTICS / ADVANTAGES

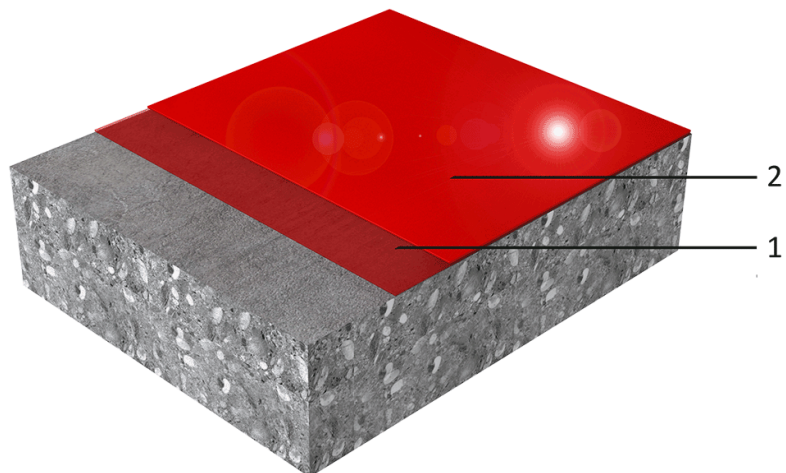
- Improved chemical resistance
- Improved mechanical resistance
- Liquid proof
- Abrasion resistant

### APPROVALS / STANDARDS

Fire classification report, class Bfl-S1 according to DIN EN 13501-1, Report No. 2013-B-2119/07, MPA Dresden Institute, Germany,

### SYSTEM INFORMATION

#### System Structure



Sikafloor® MultiDur ES-31 system (~ 2-3 mm)

1. Primer	Sikafloor®-161 HC
2. Wearing coat	Sikafloor®- 381

#### Composition

Epoxy

#### Appearance

Smooth, gloss finish

Colour	Available in various colour shades.
Nominal Thickness	~2.0-3.0 mm

## TECHNICAL INFORMATION

Reaction to Fire	Bfl-S1	(DIN EN 13501-1)
Chemical Resistance	Refer to the chemical resistance of Sikafloor®- 381	

## APPLICATION INFORMATION

Consumption	<b>Sikafloor® MultiDur ES-31 system (~ 2-3 mm)</b>			
	<b>Coating System</b>	<b>Product</b>	<b>Consumption</b>	
	Primer	1 x Sikafloor®-161 HC	~ 0.3–0.5 kg/m <sup>2</sup>	
	Wearing coat	Sikafloor®- 381 filled with quartz sand 0.1–0.3 mm	1.8 kg/m <sup>2</sup> /mm binder + quartz sand <ul style="list-style-type: none"> <li>▪ 10 °C–15 °C: without filling</li> <li>▪ 15 °C–20 °C: 1 : 0.1 pbw (1.65 + 0.15 kg/m<sup>2</sup>)</li> <li>▪ 20 °C–30 °C: 1 : 0.2 pbw (1.5 + 0.3 kg/m<sup>2</sup>)</li> </ul>	
Product Temperature	Please refer to the individual Product Data Sheet			
Ambient Air Temperature	+10 °C min. / +30 °C max.			
Relative Air Humidity	80 % r.h. max.			
Dew Point	Beware of condensation! The substrate and uncured floor must be at least 3 °C above dew point to reduce the risk of condensation or blooming on the floor finish.			
Substrate Temperature	+10 °C min. / +30 °C max.			
Substrate Moisture Content	When performing application work with Sikafloor® MultiDur ES-31, the substrate moisture content must not exceed 4 % pbw measured by Tramex. Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).			
Waiting Time / Overcoating	Before applying Sikafloor®-381 on Sikafloor®-161 HC allow:			
	<b>Substrate temperature</b>	<b>Minimum</b>	<b>Maximum</b>	
	+10 °C	24 hours	4 days	
	+20 °C	12 hours	2 days	
	+30 °C	8 hours	1 day	
	Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.			
Applied Product Ready for Use	<b>Temperature</b>	<b>Foot traffic</b>	<b>Light traffic</b>	<b>Full cure</b>
	+10°C	~ 24 hours	~ 3 days	~ 10 days
	+20°C	~ 18 hours	~ 2 days	~ 7 days
	+30°C	~ 12 hours	~ 1 days	~ 5 days

## PRODUCT INFORMATION

Packaging	Please refer to the individual Product Data Sheet
Shelf Life	Please refer to the individual Product Data Sheet
Storage Conditions	Please refer to the individual Product Data Sheet

## MAINTENANCE

### CLEANING

Please refer to the Method Statement Sikafloor®-Cleaning Regime

### FURTHER DOCUMENTS

Please refer to :

- Sika® Method Statement Mixing & Applications of Flooring systems
- Sika® Method Statement Evaluation and Preparation of Surfaces for Flooring systems

### IMPORTANT CONSIDERATIONS

- Do not apply Sikafloor® MultiDur ES-31 on substrates with rising moisture.
- Freshly applied Sikafloor® MultiDur ES-31 must be protected from damp, condensation and water for at least 24 hours.
- The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.
- For exact colour matching, ensure the Sikafloor®-381 in each area is applied from the same control batch numbers.
- Under certain conditions, underfloor heating or high ambient temperatures combined with high point loading, may lead to imprints in the resin.
- If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO<sub>2</sub> and H<sub>2</sub>O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.

### BASIS OF PRODUCT DATA

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.

## LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

## ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) 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.

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