BUILDING TRUST

PRODUCT DATA SHEET

Sikafloor® Garage

2-part low emission water-based epoxy coating

DESCRIPTION

Sikafloor® Garage is a 2-part, epoxy, water based, coloured, floor coating that can provide a seamless, low maintenance, chemical resistant, smooth gloss finish. For normal -medium wear conditions. Internal and external use.

USES

The Product is used as a:
- Coating for concrete, cementitious screeds, Sikafloor epoxy broadcast systems and Sikadur epoxy mortars
- Normal up to medium heavy mechanical and chemical exposure

The product is used for:
- Production areas
- Warehouses
- Car park decks
- Garages with light to medium traffic

Please note:
- The Product may only be used by experienced professionals.

CHARACTERISTICS / ADVANTAGES

- Low VOC emissions
- Good mechanical resistance
- Good resistance to chemicals
- Water vapour permeable
- Water dilutable
- Easily applied by roller

ENVIRONMENTAL INFORMATION

- Conforms with LEED v4 MR credit: Building product disclosure and optimization — Environmental Product Declarations (option 1)
- VOC emissions AFSSET, Sikafloor® Garage, eurofins, Report No.G20255C02
- VOC emissions, AgBB, Sikafloor® Garage, eurofins, Approval No. G20255B02
- VOC emissions, Indoor air comfort, Sikafloor® Garage, eurofins, Report No. G2025

APPROVALS / STANDARDS

- Fire Testing EN ISO 9239-1, Sikafloor Garage, Textiles, Test report No.19-1121-1

PRODUCT INFORMATION

Chemical Base	Water based epoxy	
Packaging	Part A	3.40 ltr containers
	Part B	1.60 ltr containers
	Part A + B	5 ltr containers
	Refer to current price list for packaging variations.	
Shelf Life	12 months from date of production	
Storage Conditions	The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to packaging. Refer to the current Safety Data Sheet for information on safe handling and storage.	

Appearance / Colour

Resin - Part A	coloured, liquid
Hardener - Part B	white, liquid

Final floor appearance: Smooth, gloss finish
Standard Colour: pebble grey (~RAL 7032)
Applied colours selected from colour charts will be approximate. For colour matching: Apply colour sample and confirm colour under real lighting conditions.
When product is exposed to direct sunlight, there may be some discolouration and colour variation, this has no influence on the function and performance of the coating.
Product can be used outside provided discolouration is acceptable to the customer.

Density

Resin	Density at +23 °C	(EN ISO 2811-1)
Part A	~1.33 kg/L	
Part B	~1.07 kg/L	
Mixed resin	~1.3 kg/L	

Solid content by weight

~56 %

Solid content by volume

~45 %

TECHNICAL INFORMATION

Abrasion Resistance

~56 mg (CS 10 /1000 g /1000 cycles) (14 days / +23 °C) (DIN 53109)

Thermal Resistance

IMPORTANT
Exposure to moist or wet heat
This product, can resist short-term moist or wet heat of up to +80 °C, if the exposure is only temporary (less than 1 hour). However, during exposure to moist or wet heat, do not also subject the Product to chemical and/or mechanical strain, as it may cause damage.

Exposure	Dry heat
Permanent	+60 °C
Short-term max. 7 days	+80 °C
Short-term max. 12 hours	+100 °C

Chemical Resistance

Resistant to many chemicals. Contact Sika technical service for specific information

APPLICATION INFORMATION

Mixing Ratio

Part A : Part B = 73: 27 (by weight)

Consumption

~0.2–0.3 kg/m² applied as a roller coating
Note: Consumption data is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.

Product Temperature

Maximum	+30 °C
Minimum	+10 °C

Ambient Air Temperature

Maximum	+30 °C
Minimum	+10 °C

Relative Air Humidity

80 % maximum

Dew Point

Beware of condensation. The substrate and uncured applied product must be at least +3 °C above dew point to reduce the risk of condensation or blooming on the surface of the applied product. Low temperatures and

high humidity conditions increase the probability of blooming.

Substrate Temperature

Maximum	+30 °C
Minimum	+10 °C

Substrate Moisture Content

Substrate	Test method	Moisture content
Cementitious substrates	Sika® Tramex moisture metre	≤ 6 %
Cementitious substrates	Calcium carbide method (CM-method)	≤ 4 %

Substrate	Test method	Moisture content
Magnesite screeds	Calcium carbide method (CM-method)	≤ 4 %
Anhydrite screeds	Calcium carbide method (CM-method)	≤ 0.3 %

No rising moisture (ASTM D4263, polyethylene sheet)

Pot Life

Temperature	Time
+30 °C	~30 minutes
+20 °C	~60 minutes
+10 °C	~120 minutes

Curing Time

Substrate temperature	Maximum	Minimum
+30 °C	3 days	10 hours
+20 °C	6 days	20 hours
+10 °C	7 days	48 hours

Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.

Applied Product Ready for Use

Temperature	Foot traffic	Light traffic	Full cure
+30 °C	~10 hours	~2 days	~5 days
+20 °C	~20 hours	~3 days	~7 days
+10 °C	~48 hours	~5 days	~10 days

Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.

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.

FURTHER DOCUMENTS

- Sika® Method Statement: Evaluation and Preparation of Surfaces for Flooring Systems
- Sika® Method Statement: Mixing & Application of Flooring Systems
- Sika® Method Statement: Sikafloor®-Cleaning Regime

LIMITATIONS

- After application, the Product must be protected from damp, condensation and direct water contact (rain) for at least 24 hours.
- For exact colour matching, ensure the Sikafloor® Garage in each area is applied from the same control batch numbers.
- The “gloss” of the finish can vary with temperature, humidity and the absorbency of the substrate.
- When using light colour shades (such as yellow or orange), it may be necessary to apply several coats of Sikafloor® Garage to achieve full opacity (hiding power).
- Uneven application of the coating, resulting in variable coating layer thicknesses, may cause ‘gloss’ differences in the surface finish.

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.

APPLICATION INSTRUCTIONS

IMPORTANT
Strictly follow installation procedures
Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

EQUIPMENT

Select the most appropriate equipment required for the project:
SUBSTRATE PREPARATION
- Abrasive blasting cleaning system
- Planing machine
- Scarifying machine

MIXING
- Electric double paddle mixer ~700 W (300–400 rpm)
- Scraper
- Clean mixing containers

APPLICATION
- Mixed material carrier
- Short pile (12 mm) nylon rollers

SUBSTRATE QUALITY

Cementitious substrates (concrete / screed) must be structurally sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum tensile strength of 1.5 N/mm².
Substrates must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.
Use industrial vacuuming equipment to remove all dust, loose and friable material from the application surface before applying the Product.
TREATMENT OF JOINTS AND CRACKS
Construction joints and existing static surface cracks in substrate require pre-treating before full layer application. Use Sikadur® or Sikafloor® resins.

SUBSTRATE PREPARATION

MECHANICAL SUBSTRATE PREPARATION
IMPORTANT
Exposing blow holes and voids
When mechanically preparing the surface, make sure to fully expose blow holes and voids.
1. Remove weak cementitious substrates.
2. Prepare cementitious substrates mechanically using abrasive blast cleaning or planing / scarifying equipment to remove cement laitance.
3. Before applying thin layer resins, remove high spots by grinding.
4. Use industrial vacuuming equipment to remove all dust, loose and friable material from the application surface before applying the Product.
5. Use products from the Sikafloor®, Sikadur® and Sikagard® range of materials to level the surface or fill cracks, blow holes and voids.

Contact Sika® Technical Services for additional information on products for levelling and repairing defects.
SUBSTRATE PREPARATION OF NON-CEMENTITIOUS SUBSTRATES
For information on substrate preparation of non-cementitious substrates, contact Sika technical services.

MIXING

1. Prior to mixing all parts, mix Part A (resin) using an electric double paddle mixer. Mix liquid and all the coloured pigment until a uniform colour and mix has been achieved.
2. Add Part B (hardener) to Part A.
3. Mix Part A + B continuously for ~2 minutes until a uniformly coloured mix is achieved.
   Note: Avoid excessive mixing to minimise air entrainment.
4. To ensure thorough mixing, pour materials into another container and mix again for at least 1 minute to achieve a smooth and uniform mix.
5. During the final mixing stage, scrape down the sides and bottom of the mixing container with a flat or straight edge trowel at least once to ensure complete mixing.

APPLICATION

IMPORTANT
Temporary heating
If temporary heating is required, do not use gas, oil, paraffin or other fossil fuel heaters. These produce large quantities of both carbon dioxide and water vapour, which may adversely affect the finish.
1. For heating, use only electric powered warm air blower systems.

IMPORTANT
Ventilation in confined spaces
Always ensure good ventilation when applying the Product in a confined space.
PRIMER
1. Pour mixed primer onto the prepared substrate and apply by brush, roller or squeegee.
2. Back roller in two directions at right angles to each other.
   Note: Ensure a continuous, pore free coat covers the substrate. If necessary, apply two priming coats.
3. Confirm waiting / overcoating time has been achieved before applying subsequent products. Refer to individual primer Product Data Sheet.

COATING
1. Apply the Product onto the prepared substrate using a short-piled roller in two directions at right angles to each other.
   Note: A seamless finish can be achieved if a ‘wet’ edge is maintained during application.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be removed mechanically.

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.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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