

BUILDING TRUST

PRODUCT DATA SHEET Sikafloor®-2100

EPOXY ACRYLIC HYBRID WATER BASED RESIN FLOOR COATING

DESCRIPTION

Sikafloor[®]-2100 is a 2-part epoxy acrylic hybrid coloured water based resin floor coating based on coelastic technology for asphalt and cementitious substrates. The coating provides a seamless, smooth semi-gloss finish for sports flooring, demarcation areas and light wheeled traffic exposure. Varying thickness's can be achieved from 2.0–3.0 mm. Internal and external use.

USES

Sikafloor[®]-2100 may only be used by experienced professionals.

- Multi-purpose sports flooring surface
- Coating for bicycle and pedestrian lanes in parks and recreational areas
- Coating for pedestrian areas, sidewalks, house accesses, etc.

PRODUCT INFORMATION

CHARACTERISTICS / ADVANTAGES

- Easy application
- Good aesthetic finish
- Resistant to light wheeled traffic
- Good flexibility
- Available in many colours
- Resistant to occasional hydrocarbon spillages
- Suitable for asphalt substrates
- Can be filled with quartz sand to varying thickness's and cost savings

| Composition Packaging | Epoxy acrylic hybrid water-based resin combination | | |
|--------------------------|---|--------------------------|--|
| | Part A | 9.5 kg containers | |
| | Part B | 0.5 kg plastic bag | |
| | Parts A+B | 10 kg ready to mix units | |
| Appearance / Colour | Smooth semi- gloss finish | | |
| | Resin – Part A | Coloured liquid | |
| | Hardener – Part B | White liquid | |
| | Available colours: grey (~RAL 7015), white, black, yellow (~RAL 1003), sand, oxide red (~RAL 3011), signal red (~RAL 3020), moss green (~RAL 6020), light green (~RAL 6021), mint green (~RAL 6018), cobalt blue (~RAL 5013), light blue (~RAL 5015), navy blue (~RAL 5010), platinum grey (~RAL 7036), cement grey (~RAL 7032), dark grey (~RAL 7015), beige (~RAL 1001), brown (~RAL 8002), ivory (~RAL 1015). For better opacity of colours signal red, mint green and yellow, apply an- | | |

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| | other top coat layer. Applied colours selected from colour charts will be approximate. It is recommended that applied colour samples must be compared against colour chart colours under the same lighting conditions before final selec- tion. When product is exposed to direct sunlight there may be some discoloura- tion and colour variation, this has no influence on the function and per- formance of the coating. | |
|-------------------------|--|------------|
| Shelf Life | 12 months from the 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. | |
| Density | Part A | ~1.25 kg/l |
| | Part B | ~1.05 kg/l |
| | Mix resin | ~1.20 kg/l |
| | All density values at +20 °C | |
| Solid content by weight | ~47 % | |
| Solid content by volume | ~35 % | |
| Product Declaration | EN 13813: Bfls1 SR-B3.0 –AR0.4 -IR 24.5 EN 1504-2 Surface protection product for concrete - Coating | |

TECHNICAL INFORMATION

| Shore D Hardness | ~64 | |
|------------------------------|---|----------------------|
| Abrasion Resistance | 110 mg (Taber abrasion test) | |
| Tensile Strength | ~2.7 N/mm² | (UNE EN ISO 527-1/2) |
| Elongation at Break | ~40 % | |
| Tensile Adhesion Strength | ≥ 1.5 N/mm² | (UNE EN 1542) |
| Chemical Resistance | Contact Sika Technical Services for specific information. | |
| Permeability to Water Vapour | ~0.005 kg/m ² ·h ^{0.5} | (UNE – EN 1062-3) |
| | | |

SYSTEM INFORMATION

| Systems | Refer to the following system data sheets: | |
|---------|--|---|
| | Sikafloor [®] MultiCoat AB-10 | Epoxy hybrid water based resin floor system for concrete substrates |
| | Sikafloor [®] MultiCoat AB-11 | Epoxy hybrid water based resin floor system for asphalt substrates |

APPLICATION INFORMATION

| Mixing Ratio | Part A : Part B = 96:4 (by weight) | |
|-------------------------|--|--|
| Consumption | 0.3–0.6 kg/m² (Concrete Substrate) 0.7-1.0 kg/m² (Alsphalt/Bituminous Substrate) Refer to the system data sheets. These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc. For detailed information, refer to the system data sheet Sikafloor[®] Multicoat AB-10 and AB-11. | |
| Ambient Air Temperature | +10 °C min. / +30 °C max. | |
| Relative Air Humidity | 80 % maximum (Also refer to important considerations below) | |

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| Dew Point | Beware of condensation The substrate and uncured applied floor material must be at least 3 °C above dew point to reduce the risk of condensation or blooming on the floor finish. Low temperatures and high humidity conditions increase the probability of blooming. | |
|-------------------------------|---|-------------|
| Substrate Temperature | +10 °C min. / +30 °C max. | |
| Substrate Moisture Content | Refer to system data sheet and relevant primer PDS. No rising moisture according to ASTM (Polyethylene-sheet). | |
| Pot Life | Temperatures | Time |
| | +10 °C | ~90 minutes |
| | +20 °C | ~60 minutes |
| | +30 °C | ~30 minutes |
| Applied Product Ready for Use | Refer to system data sheets | |

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Cementitious substrates (concrete / screed) must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum tensile strength of 1.5 N/mm².

Cementitious and asphalt substrates must be clean, free from standing water and contaminants such as dirt, oil, grease, coatings and surface treatments, etc. Cementitious and asphalt substrates must be prepared mechanically using suitable abrasive blast cleaning or planing / scarifying equipment to remove cement laitance and an open textured gripping surface profile suitable for the product thickness. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by vacuum cleaning equipment.

MIXING

Unfilled

Prior to mixing all parts, mix part A (resin) using a low speed single paddle electric stirrer (300–400 rpm) to mix liquid and all the coloured pigment until a uniform colour has been achieved. Add part B (hardener) to part A and mix part A + B continuously for 2 minutes until a uniformly coloured mix has been achieved. To ensure thorough mixing pour materials into another container and mix again to ensure complete and thorough mixing. Over mixing must be avoided to minimise air entrainment.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. Mix full units only. Mixing time for A+B = 2.0 minutes

Sand Filled

Prior to mixing all parts, mix separately part A (resin) using a low speed single paddle electric stirrer (300–400 rpm) to mix liquid and all the coloured pigment until a uniform colour has been achieved. Add part B (hardener) to part A and mix part A + B continuously for 2 minutes until a uniformly coloured mix has been achieved. When parts A and B have been mixed. Using a double paddle (axis) electric stirrer (> 700 W),

Product Data Sheet Sikafloor®-2100 March 2020, Version 01.01 020813020010000027 pan type revolving or forced action mixer (free fall mixers must not be used).Gradually add the appropriate granulometry of dried quartz sand and if required Extender T. Mix for a further 2 minutes until a uniform mix has been achieved. To ensure thorough mixing pour materials into another container and mix again to achieve a smooth consistent mix. Over mixing must be avoided to minimise air entrainment. 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. Mix full units only. Mixing time for A+B+quartz sand = 4.0 minutes.

APPLICATION

Prior to application, confirm substrate moisture content, relative humidity and dew point. **Primer**

Pour mixed primer onto the prepared substrate and apply by brush, roller or squeegee. Ensure a continuous, pore free coat covers the substrate. If necessary, apply two priming coats.

Wearing coat

Sikafloor[®]-2100 is poured and spread evenly using a rubber trowel to the required thickness. If a greater thickness is required, apply additional coats.



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Top coat

Sikafloor[®]-2100 is poured and spread evenly using a squeegee, then using a short-piled roller, back roller in two directions at right angles to each other.

CLEANING OF TOOLS

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

FURTHER INFORMATION

 Sika Method Statement - Evaluation and preparation of surfaces for flooring systems

IMPORTANT CONSIDERATIONS

- Freshly applied Sikafloor[®]-2100 must be protected from damp, condensation and water contact (rain) for at least 24 hours.
- The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking on the surface.
- For exact colour matching, ensure the Sikafloor[®]-2100 in each area is applied from the same control batch numbers.
- The product should be applied in thin layers over the substrate. Excessive material consumption could lead to a delay in the hardening time. If a thicker thickness is required, apply in several coats rather than one thick coat.
- Adequate fresh air ventilation must be provided to assist removal of moisture during curing.

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.

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / j type SB) 500 g/l (Limit 2010) for the ready to use product. The maximum content of Sikafloor[®]-2100 is < 500 g/l VOC for the ready to use product.

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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