Product Data Sheet Edition 19/08/2011 Identification no: 02 08 01 05 002 0 000004 Sikafloor®-14 Pronto

Sikafloor®-14 Pronto

3-part self-smoothing screed and levelling mortar based on reactive acrylic resins

| Product Description | Sikafloor®-14 Pronto is a three part, fast curing self-smoothing screed based on reactive acrylic resins for the Sikafloor®-Pronto Modular System and can also be used as a binder for levelling mortars. Sikafloor®-14 Pronto consists of: Part A: Sikafloor®-14 Pronto Resin Part B: Sika®-Pronto Hardener Part C: Sikafloor®-Pronto Filler Sika®-Pronto Pigment is used to colour Sikafloor®-14 Pronto if required. | | | | |
|---------------------------------|--|--|--|--|--|
| Uses | For fast curing mechanically and chemically resistant coatings with layer thickness of 2 to 4 mm Particularly suitable for the beverage and food industry For fast overcoating of intermediate decks and ramps in multi-storey and underground car-parks Skid resistant and multi-coloured surfaces can be obtained by broadcasting with coloured quartz sand or coloured chips | | | | |
| Characteristics / Advantages | Very fast curing, even at low temperatures Good mechanical and chemical resistance Good UV resistance Solvent-free Part of a complete modular system | | | | |
| Test | | | | | |
| Approval / Standards | Certificate of conformity, 27053 L | J 08, Isega Germany, November 2008 | | | |
| Product Data | | | | | |
| Form | | | | | |
| Appearance / Colours | Part A: Sikafloor®-14 Pronto: Part B: Sika®-Pronto Hardener: Part C: Sikafloor®-Pronto Filler: Sika®-Pronto Pigment: ~ RAL 7032 other colours upon re | transparent, bluish liquid white, powder white, fine aggregates | | | |
| Packaging | Part A: Sikafloor [®] -14 Pronto: Part B: Sika [®] -Pronto Hardener: Part C: Sikafloor [®] -Pronto Filler: Sika [®] -Pronto Pigment: | 25 kg, 200 kg 1.0 kg (in 0.1 kg bags) 25 kg 5 kg (10 x 0.5 kg bags) | | | |



| Storage | | | | | | |
|-------------------------------------|---|---|--|--|--|--|
| Storage Conditions / Shelf Life | From date of production if stored properly in original, unopened and undamag sealed packaging, in dry conditions at temperatures between +5 ℃ and +30 ℃ | | | | | |
| | Part A: Sikafloor [®] -14 Pronto: Part B: Sika [®] -Pronto Hardener: Part C: Sikafloor [®] -Pronto Filler Sika [®] -Pronto Pigment | 12 months 6 months for an unlimited period 2 years | | | | |
| | Sikafloor [®] -Pronto Hardener must and impact. | be protected from heat, direct sunlight, moisture | | | | |
| Technical Data | | | | | | |
| Chemical Base | Reactive acrylic resins | | | | | |
| Density | ~ 0.99 kg/l (at +23 ℃) | (DIN 51 757) | | | | |
| Solid Content | ~ 100% (by volume) / ~ 100% (by | weight) | | | | |
| Mechanical / Physical Properties | | | | | | |
| Compressive Strength | Resin filled: $\sim 40 \text{ N/mm}^2 (14 \text{ days / } +23 ^{\circ}\text{C})$ (DIN 1164) | | | | | |
| Flexural Strength | Resin filled: ~ 25 N/mm ² (14 days | / +23 °C) (DIN 1164) | | | | |
| Shore D Hardness | Resin: ~ 62 | (DIN 53 505) | | | | |
| Resistance | | | | | | |
| Chemical Resistance | Resistant to many chemicals. Ple | ase ask for a detailed chemical resistance table. | | | | |
| Thermal Resistance | | | | | | |
| | Exposure* | Dry heat | | | | |
| | Permanent | +50℃ | | | | |
| | Short-term max. 2d | +60℃ | | | | |
| | Short-term max. 1h | +80℃ | | | | |
| | Short-term moist/wet heat* up to (steam cleaning etc.) | Short-term moist/wet heat* up to +80 ℃ where exposure is only occasional (steam cleaning etc.) | | | | |
| | * No simultaneous chemical and med Sikafloor®-13 / -16 / -17 Pronto as a l | nanical exposure and only in combination with proadcast system with approx. 3 - 4 mm thickness. | | | | |

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System Information

Scratch coat / levelling mortar (surface roughness up to 3 mm):

Primer: 1 x Sikafloor®-10 / -13 Pronto

Scratch coat: 1 x Sikafloor®-14 Pronto + quartz sand (0.1 - 0.3 mm) **System Structure**

+ Extender T

Broadcast system approx. 2 - 4 mm for dry interior areas:
Primer: 1 x Sikafloor®-10 / -13 Pronto
Base coat: 1 x Sikafloor®-14 Pronto

quartz sand (0.4 - 0.7 mm or 0.7 - 1.2 mm), Broadcasting:

coloured quartz sand (0.3 - 0.8 mm or 0.6 - 1.2 mm) or

coloured chips, broadcast to excess 1 - 2 x Sikafloor®-16 Pronto

Seal coat:

Broadcast system approx. 3 - 4 mm for wet areas, flexible:

1 x Sikafloor[®]-10 / -13 Pronto Primer: 1 x Sikafloor®-15 Pronto Membrane: 1 x Sikafloor®-14 Pronto Base coat: Broadcasting: quartz sand (0.7 - 1.2 mm) or

coloured quartz sand (0.6 - 1.2 mm), broadcast to excess

1 - 2 x Sikafloor®-17 Pronto Seal coat:

Broadcast system approx. 2 - 4 mm for interior and exterior areas:

Primer: 1 x Sikafloor®-10 / -13 Pronto

Base coat: 1 x Sikafloor®-14 Pronto

Broadcasting: quartz sand (0.7 - 1.2 mm) or

coloured quartz sand (0.6 - 1.2 mm), broadcast to excess

1 – 2 x Sikafloor[®]-18 Pronto Seal coat:

Broadcast system approx. 3 - 4 mm for interior and exterior areas, flexible:

Primer: 1 x Sikafloor®-10 / -13 Pronto

Membrane: 1 x Sikafloor®-15 Pronto

Base coat: 1 x Sikafloor®-14 Pronto Primer: Base coat: quartz sand (0.7 - 1.2 mm) or Broadcasting:

coloured quartz sand (0.6 - 1.2 mm), broadcast to excess

1 - 2 x Sikafloor[®]-18 Pronto Seal coat:

Application Details

| _ • • | | | |
|-------------|---|--|---|
| Consumption | Coating System | Product | Consumption |
| | Primer | Sikafloor®-10 / -13 Pronto | 0.4 - 0.5 kg/m ² |
| | Levelling Mortar (surface roughness max 3 mm) | 1 pbw Sikafloor®-14 Pronto (without Filler), 1.5 - 2.0 pbw quartz sand (0.1 - 0.3 mm), 0.01 - 0.02 pbw Extender T | ~ 1.5 kg/m²/mm (0.5 kg part A + 1 kg quartz sand + 0.01 kg Extender T) |
| | Broadcast base coat using quartz sand or coloured quartz sand | Sikafloor®-14 Pronto inclusive Filler, Hardener and (optional) Pigment (refer to mixing table) | 1.5 - 4.0 kg/m ² |
| | (film thickness ~ 2 - 4 mm) | broadcast with quartz sand or coloured quartz sand | ~ 4.0 kg/m ² |
| | Broadcast base coat using coloured chips (film thickness | Sikafloor®-14 Pronto inclusive Filler, Hardener and (optional) Pigment (refer to mixing table) | 5.0 kg/m ² |
| | ~ 3 - 4 mm) | broadcast with colour chips | ~ 0.5 kg/m ² |
| | Seal coat (dry interior | Sikafloor®-16 Pronto | ~ 0.6 - 0.8 kg/m² in 1 to 2 coats |
| | areas) | (incl. Pigment if required) | |
| | Seal coat (interior and | Sikafloor®-18 Pronto | ~ 0.6 - 0.8 kg/m ² in 1 to 2 coats |
| | exterior areas) | (incl. Pigment if required) | |
| | Seal coat (permanent | Sikafloor®-17 Pronto | 1 st coat: 0.5 - 0.6 kg/m ² |
| | or part-time (approx. >25%) wet areas) | (incl. Pigment if required) | 2 nd coat: 0.3 - 0.4 kg/m² (optional) |

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These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.

Substrate Quality The cementitious substrate must be sound and of sufficient compressive strength (min. 25 N/mm²) with a minimum pull-off strength 1.5 N/mm². The substrate must be clean dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. The application of a trial area is mandatory to ensure the compatibility of the substrate and the proposed Sikafloor Pronto System, especially when cementisious substrates treated with a curing agent Concrete substrates must be prepared mechanically using abrasive blast cleaning **Substrate Preparation** or scarifying equipment to remove cement laitance and achieve an open textured surface. Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed. Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, SikaDur® and SikaGard® range of materials. The concrete or screed substrate has to be primed or levelled in order to achieve an even surface. High spots must be removed by e.g. grinding. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

Application Conditions / Limitations

| Substrate Temperature | 0 °C min. / +30 °C max. | | | |
|-----------------------|--|--|--|--|
| Ambient Temperature | 0°C min. / +30°C max. | | | |
| Substrate Moisture | ≤ 4% pbw moisture content. | | | |
| Content | Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method. | | | |
| | No rising moisture according to ASTM (Polyethylene-Sheet). | | | |
| 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. | | | |

Application Instructions

Mixing

Self-smoothing screed and levelling mortar:

Part A: Part C: Pigment = 12.5: 25: 1 (by weight)

The amount of Hardener required is dependent on the ambient- and substrate temperature (see table below).

| Sikafloor®-14 Pronto | Sil | ka [®] -Pront | o Harder | ier | Sikafloor [®] -Pronto Filler | Sika [®] -Pronto Pigment |
|------------------------------------|-----------------|------------------------|-----------------|-----------------|--|--------------------------------------|
| 12.5 kg | 0℃ | +10℃ | +20℃ | +30℃ | | |
| Sika®-Pronto Hardener (%pbw) | 750 g (6.0%) | 500 g (4.0%) | 375 g (3.0%) | 250 g (2.0%) | 25 kg | 1 kg |

Seal coat (underneath Sikafloor®-16 Pronto):

Part A: Pigment = 9:1 (by weight)

The amount of Hardener required is dependent on the ambient- and substrate temperature (see table below).

| Sikafloor®-14 Pronto | Sika®-Pronto Hardener | | | | |
|---------------------------------------|-----------------------|------|------|------|--|
| | 0℃ | +10℃ | +20℃ | +30℃ | |
| Sika [®] -Pronto Hardener | 6.0% | 4.0% | 3.0% | 2.0% | |

| | <u></u> | | | | |
|-------------------------------|--|--|--|--|--|
| | The hardener powder can also be ordered under the product name "Perkadox CH 50 X" by Akzo Nobel, www.akzonobel.com, "Interox BP-50 FT" by Degussa, www.degussa.com or "BP 50 W+" by Pergan GmbH, www.pergan.com. | | | | |
| Mixing Time | Mix part A thoroughly, then add the Sikafloor [®] -Pronto Filler, and (if required) the Sika [®] -Pronto Pigment and mix for at least 1 minute. When the different components are adequately mixed, add the Hardener in the correct quantity and mix for a further 1 minute. | | | | |
| | Over mixing must be avoided to minimise air entrainment. | | | | |
| | For ease of handling, 25 kg units may be split (2 x 12.5 kg) (refer to Mixing table). Always weigh out components. | | | | |
| Mixing Tools | For indoor work, spark free mixing equipment must be used (explosion-proof)! | | | | |
| | Sikafloor®-14 Pronto must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment. | | | | |
| Application Method / Tools | Prior to application, confirm substrate moisture content, r.h. and dew point. | | | | |
| | For external applications, apply on a falling temperature. If applied during rising temperatures "pin holing" may occur from rising air. | | | | |
| | Levelling: Rough surfaces need to be levelled first. Therefore use e.g. Sikafloor®-14 Pronto or Sikadur®-12 Pronto levelling mortar (see PDS). Apply by squeegee / trowel to the required thickness. | | | | |
| | Broadcast base coat: Sikafloor®-14 Pronto is poured, spread evenly by means of a serrated trowel. Roll immediately in one direction with a spiked roller to ensure even thickness and to remove entrapped air. Immediately afterwards, broadcast with quartz sand. | | | | |
| | Note: broadcast quartz sand in ca. three steps, which means the first couple of times broadcast slightly, then to excess in order to ensure an even distribution of quartz sand and to avoid misplacing of the material. | | | | |
| | A multi coloured surface can be obtained by broadcasting with coloured-chips or coloured-quartz. (The compatibility of the coloured-chips to PMMA-systems must be checked prior to application). | | | | |
| | The material cures very quickly and therefore application must be carried out steadily and "wet on wet" in order to achieve joint free floors. | | | | |
| Cleaning of Tools | Clean all tools and application equipment with Thinner C immediately after use. Hardened and/or cured material can only be removed mechanically. | | | | |

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Waiting Time / Overcoating

Before applying Sikafloor®-14 Pronto on Sikafloor®-13 Pronto allow:

| Substrate temperature | 0℃ | +10℃ | +20℃ | +30℃ |
|-----------------------|----|------|------|------|
| Minimum(minutes) | 50 | 45 | 40 | 35 |
| Maximum (minutes) | * | * | * | * |

Before applying Sikafloor®-14 Pronto on Sikafloor®-10 Pronto allow:

| Substrate temperature | 0℃ | +10℃ | +20℃ | +30℃ |
|-----------------------|----|------|------|------|
| Minimum(minutes) | 70 | 50 | 50 | 35 |
| Maximum (minutes) | * | * | * | * |

Before applying Sikafloor[®]-14 Pronto on Sikafloor[®]-15 Pronto allow:

| Substrate temperature | +5℃ | +10℃ | +15℃ | +20℃ | +25℃ | +30℃ |
|-----------------------|-----|------|------|------|------|------|
| Minimum(minutes) | 80 | 60 | 50 | 45 | 35 | 30 |
| Maximum (minutes) | * | * | * | * | * | * |

Before applying Sikafloor $^{\rm @}$ -14 Pronto / -16 Pronto / -17 Pronto on Sikafloor $^{\rm @}$ -14 Pronto allow:

| Substrate temperature | 0℃ | +10℃ | +20℃ | +30℃ |
|-----------------------|----|------|------|------|
| Minimum(minutes) | 80 | 60 | 45 | 35 |
| Maximum (minutes) | * | * | * | * |

^{*}No time limit, the Sikafloor®-Pronto materials can be applied on each other after thorough clear

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

Notes on Application / Limitations

Do not use Sikafloor®-14 Pronto on substrates with rising moisture.

In case of broadcast systems with a finer quartz sand, e.g. 0.4 - 0.7 mm, curing defects may occur which may require additional hardener. A trial area is mandatory.

Freshly applied Sikafloor®-14 Pronto must be protected from damp, condensation and water for at least 1 hour.

Use spark proof mixing equipment for internal applications.

Always ensure good ventilation when using Sikafloor®-14 Pronto in a confined space.

In order to ensure optimum curing during internal applications the air must be exchanged at least seven times per hour. During application and curing use a forced fresh air supply/exhausting of fumes with appropriate equipment (explosion-proof).

Systems based on reactive acrylic resins exhibit a characteristic odour during application and prior to achieving full cure, once fully cured they are taint free. All unpackaged goods should be removed from the area of the works during application. Do not apply in the presence of foodstuffs. Any foodstuffs, whether packaged or not, should be completely isolated from the flooring works during the application process and until the products are fully cured.

Tools

Recommended Supplier of Tools:

PPW-Polyplan-Werkzeuge GmbH, Phone: +49 40/5597260, www.polyplan.com Serrated trowel for smooth wearing layer:

e.g. Large-Surface Scrapper No. 565, Toothed blades No. 25

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The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.

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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 CO₂ and H₂O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.

Curing Details

Applied Product ready for use

| | 0℃ | +10 <i>°</i> C | +20°C | +30℃ |
|------------------------|------|----------------|-------|------|
| Foot traffic (minutes) | ~ 80 | ~ 60 | ~ 45 | ~ 35 |
| Full cure (hours) | ~ 3 | ~ 3 | ~ 2 | ~ 2 |

Times are approximate and will be affected by changing ambient conditions.

Value Base

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.

Health and Safety Information

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

EU Regulation 2004/42

VOC - Decopaint Directive According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / j type sb) is 500 g/l (Limit 2010) for the ready to use product.

The maximum content of **Sikafloor**[®]**-14 Pronto** is < 500 g/l VOC for the ready to use product.



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