Product Data Sheet
Edition 15/01/2009
Identification no:
01 08 01 05 003 0 000004
Sikafloor®-16 Pronto

CE **EN 13813** **08**
EN 1504-2 **08** **1119 - CPD - 1131**

Sikafloor®-16 Pronto

2-part seal coat based on reactive acrylic resins

Construction

Product Description

Sikafloor®-16 Pronto is a two-part, fast curing seal coat based on reactive acrylic resins for the Sikafloor®-Pronto Modular System.

Sikafloor®-16 Pronto consists of:

Part A: Sikafloor®-16 Pronto resin
Part B: Sika®-Pronto Hardener

Sika®-Pronto Pigment is used to colour Sikafloor®-16 Pronto where required.

Uses

- Seal coat for broadcast layers of the Sikafloor®-Pronto Modular System (dry or exterior areas)
- Seal coat for broadcast screeds prepared of e.g. Sikafloor®-81 EpoCem or Sikafloor®-261 if broadcast to excess (dry or exterior areas)
- Particularly suitable for food industry use
- For fast overcoating of ramps in multi-storey and underground car-parks

Characteristics / Advantages

- Very fast curing, even at low temperatures
- Good mechanical and chemical resistance
- Very good UV-resistance, also for exterior areas
- Solvent-free
- Part of a complete modular system

Test

Approval / Standards Conforms to the requirements of DIN 51130 (Skid / slip resistance).

Product Data

Form

Appearance / Colours

Part A: Sikafloor®-16 Pronto: transparent, bluish liquid
Part B: Sika®-Pronto Hardener: white, powder

Sika®-Pronto Pigment:
approx. 7032 other colours upon request.

Packaging

Part A: Sikafloor®-16 Pronto: 25 kg, 200 kg
Part B: Sika®-Pronto Hardener: 0.96 kg bags
Sika®-Pronto Pigment: 5 kg (10 x 0.5 kg bags)

Storage

Storage Conditions / Shelf Life

From date of production if stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5°C and +30°C:

Part A: Sikafloor®-16 Pronto: 12 months
Part B: Sika®-Pronto Hardener: 6 months
Sika®-Pronto Pigment 2 years

Sikafloor® -Pronto Hardener must be protected from heat, direct sunlight, moisture and impact.

Technical Data

Chemical Base Reactive acrylic resins

Density ~ 0.99 kg/l (at +23°C) (DIN 51 757)

Solid Content ~ 100% (by volume) / ~ 100% (by weight)

Resistance

Chemical Resistance Resistant to many chemicals. Please ask for a detailed chemical resistance table.

Thermal Resistance

Exposure*	Dry heat
Permanent	+50°C
Short-term max. 1h	+80°C

* No simultaneous chemical and mechanical exposure and only in combination with Sikafloor®-14 Pronto as a broadcast system with approx. 3 - 4 mm thickness.

System Information

System Structure

Sealing of broadcast screed:

Broadcast system approx. 3 - 4 mm for dry areas:
Primer: 1 x Sikafloor®-13 Pronto
Base coat: 1 x Sikafloor®-14 Pronto
Broadcasting: quartz sand (0.4 - 0.7 mm or 0.7 - 1.2 mm), coloured quartz sand (0.6 - 1.2 mm) or coloured chips, broadcast to excess
Seal coat: 1 - 2 x Sikafloor-16 Pronto

Also suitable for sealing of e.g. Sikafloor®-261 and Sikafloor®-81 EpoCem if fully broadcast.

Application Details

Consumption

Coating System	Product	Consumption
Transparent seal coat onto Sikafloor-14 Pronto broadcast systems for dry areas	Sikafloor®-16 Pronto	~ 0.5 - 0.8 kg/m² in 1 - 2 coats (total max. 0.8 kg/m²)
Coloured seal coat onto Sikafloor-14 Pronto broadcast systems for dry areas	Sikafloor®-16 Pronto (9 pbw) + Sika®-Pronto Pigment (1 pbw)	~ 0.5 - 0.8 kg/m² in 1 - 2 coats (total max. 0.8 kg/m²)

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 substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.

Pull-off strength shall be not less than 1.5 N/mm²

If in doubt, apply a test area first.

Substrate Preparation

All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush or vacuum.

Application Conditions / Limitations

Substrate Temperature

-5°C min. / +30°C max.

Ambient Temperature

-5°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.

Application Instructions

Mixing

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

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

Sikafloor®-16 Pronto	Sika-Pronto Hardener				
9 kg	-5°C	0°C	+10°C	+20°C	+30°C
Sika®-Pronto Hardener (%pbw)	450 g (5.0%)	360 g (4.0%)	270 g (3.0%)	180 g (2.0%)	90 g (1.0%)

Mixing Time

Mix part A thoroughly then add the Hardener in the correct quantity and mix for a further 1 minute.

Pigmented: Mix part A thoroughly. Premix the required amount of Sika-Pronto Pigment with the same quantity of part A by dissolver. Mix part A and the obtained pigment powder (overall content of Sika-Pronto Pigment in the mixture = 10%) for at least 3 minutes. Then 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 (refer to Mixing table).
Always weigh out components.

Mixing Tools

For indoor work, spark-free mixing equipment must be used (explosion-proof)!

Sikafloor®-16 Pronto must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment.

For the preparation of the pigment powder, a dissolver must be used.

Application Method / Tools

Prior to application confirm r.h. and dew point.

Seal coat:
Immediately after mixing, pour the Sikafloor®-16 Pronto onto the substrate and spread evenly by means of a “non-fuzzing” short-pile nylon roller or squeegee.

A seamless finish can be achieved if a ‘wet’ edge is maintained during application.

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.

Potlife

	-5 °C	0 °C	+10 °C	+20 °C	+30 °C
Time (minutes)	~ 25	~ 17	~ 15	~ 15	~ 8

Waiting Time / Overcoating

Before applying Sikafloor®-16 Pronto on Sikafloor®-14 Pronto allow:

Substrate temperature	-5 °C	0 °C	+10 °C	+20 °C	+30 °C
Minimum (minutes)	120	80	60	45	35
Maximum (minutes)	*	*	*	*	*

Note: if coloured flakes are used, 30 minutes have to be added to the minimum waiting time

Before applying Sikafloor®-16 Pronto on Sikafloor®-16 Pronto allow:

Substrate temperature	-5 °C	0 °C	+10 °C	+20 °C	+30 °C
Minimum (minutes)	70	50	40	40	25
Maximum (minutes)	*	*	*	*	*

*No time limits, the Sikafloor®-Pronto materials can be applied on each other after thorough cleaning

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

For application on fully broadcast Sikafloor®-261 or similar screeds refer to the PDS of this material.

Notes on Application / Limitations

Freshly applied Sikafloor®-16 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®-16 Pronto in a confined space.

For areas with frequent water load (approx. >25% of time), use Sikafloor-17 Pronto as a seal coat.

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 (spark-free / explosion-proof).

Unevenness of substrates as well as inclusions of dirt cannot be covered by thin sealer coats. Therefore substrate and adjacent areas must be cleaned thoroughly prior to application.

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.

For exact colour matching, ensure the Sika® -Pronto Pigment in each area is applied from the same control batch number.

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_2 and H_2O 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

	-5℃	0℃	+10℃	+20℃	+30℃
Foot traffic (minutes)	~ 70	~ 50	~ 40	~ 40	~ 25
Full cure (hours)	~ 2	~ 2	~ 1	~ 1	~ 1

Note: Times are approximate and will be affected by changing ambient conditions

Cleaning / Maintenance

Methods

To maintain the appearance of the floor after application, Sikafloor®-16 Pronto must have all spillages removed immediately and be regularly cleaned using rotary brush, mechanical scrubbers, scrubber dryer, high pressure washer, wash and vacuum techniques etc. using suitable detergents and waxes.

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.

CE Labelling

The harmonized European Standard EN 13 813 „Screed material and floor screeds - Screed materials - Properties and requirements“ specifies requirements for screed materials for use in floor construction internally.

Structural screeds or coatings, i.e. those that contribute to the load bearing capacity of the structure, are excluded from this standard.

Resin floor systems as well as cementitious screeds fall under this specification. They have to be CE-labelled as per Annex ZA. 3, Table ZA.1.5 and 3.3 and fulfil the requirements of the given mandate of the Construction Products Directive (89/106):

CE	
Sika Deutschland GmbH Kornwestheimerstraße 103-107 D - 70439 Stuttgart Germany	
08 [1)]	
EN 13813 SR-B1,5-AR1	
Primer/Sealer (systems as per Product Data Sheet)	
Reaction to fire:	NPD[2)]
Release of corrosive substances (**S**ynthetic **R**esin Screed):	SR
Water permeability:	NPD
Abrasion **R**esistance:	AR 1
Bond strength:	B 1,5
Impact **R**esistance:	NPD
Sound insulation:	NPD
Sound absorption:	NPD
Thermal resistance:	NPD
Chemical resistance:	NPD

[1)] Last two digits of the year in which the marking was affixed.

[2)] No performance determined.

Construction

CE Labelling

The harmonized European Standard EN 1504-2 „Products and systems for the protection and repair of concrete structures – Definitions, requirements, quality control and evaluation of conformity – Part 2 : Surface protection systems for concrete" gives specifications for products and systems used as methods for the various principles presented under EN 1504-9.

Products which fall under this specification have to be CE-labelled as per Annex ZA. 1, Tables ZA.1a to ZA 1g according to the scope and relevant clauses there indicated, and fulfil the requirements of the given mandate of the Construction Products Directive (89/106):

Here below indicated are the minimum performance requirements set by the standard. For the specific performance results of the product to the particular tests, please see the actual values above in the PDS.

CE	
1119	
Sika Deutschland GmbH Kornwestheimerstraße 103-107 D - 70439 Stuttgart Germany	
08 [1)]	
1119–CPD–1131	
EN 1504-2	
Surface Protection Product Coating [2)]	
Abrasion resistance (Taber test):	< 3000 mg
Permeability to CO_2:	S_D > 50 m
Permeability to water vapour:	Class III
Capillary absorption and permeability to water:	$w < 0.1$ kg/m^2 x h^{0,5}
Resistance to severe chemical attack: [3)]	Class I
Impact resistance:	Class I
Adhesion strength by pull-off test:	≥ 2.0 N/mm²
Fire Classification: [4)]	E_{fl}

[1)] Last two digits of the year in which the marking was affixed.

[2)] Tested as a part of a system build-up with Sikafloor®-14 Pronto and Sikafloor®-16 Pronto.

[3)] Please refer to the Sikafloor® Chemical Resistance Chart.

[4)] Min. classification, please refer to the individual test certificate.

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 550 / 500 g/l (Limits 2007 / 2010) for the ready to use product.

The maximum content of **Sikafloor®-16 Pronto** is < 500 g/l VOC for the ready to use product.

Sika Limited
Watchmead
Welwyn Garden City
Hertfordshire
AL7 1BQ
United Kingdom

Phone +44 1707 394444
Telefax +44 1707 329129
www.sika.co.uk, email: sales@uk.sika.com