

Sikafloor®-ColourSeal W

Water Based, Coloured Curing and Sealing Compound for Concrete Floors

Product Description

Sikafloor®-ColourSeal W is a one part, coloured water based acrylic resin emulsion used to cure, harden and seal fresh or hardened concrete.

Uses

- **Sikafloor®-ColourSeal W** is used for optimum curing and sealing of fresh concrete floors and structures
- Curing compound in order to limit surface drying and cracking
- Provides curing and sealing for Sikafloor® dry shake hardeners
- Anti-dust treatment and improvement of the abrasion resistance of existing concrete surfaces
- Suitable for exterior and interior application

Characteristics / Advantages

- Excellent moisture retention; meets requirements of ASTM C-309
- Water based, environmentally friendly
- Suitable for indoor use where solvent-based products cannot be applied due to health and safety regulations
- Helps control dusting for both new and existing concrete floor surfaces
- Effectively cures, decorates and seals concrete surfaces in a single, economic operation
- Good abrasion resistance
- Quick drying
- Non yellowing
- Good adhesion to old and new concrete
- Easy application by spray or roller

Tests

Approval / Standards

Conforms to the requirements of ASTM C-309 for curing liquids, ASTM C-156 for water retention and ASTM D-4060 for improvement of abrasion resistance

Test report from GEOCISA Ref. P-05/02234 dated Feb. 14th, 2005 Abrasion resistance according to UNE 48.250-92 (ASTM D-4060)

Test report from GEOCISA Ref. P-04/02209 Rev. 1 dated Jan. 18th, 2005 Water retention according to ASTM C-156



Product Data

Form

Appearance / Colours Liquid
White (~ RAL 9010), Grey (~ RAL 7004), Traffic Grey B (~ RAL 7043), Yellow (~ RAL 1012), Green (~ RAL 6019), Red (~ RAL 3011).
All colour references are approximate as shade may vary depending on application conditions.
Other colour shades are available on request.

Packaging 20 lt metal cans

Storage

Storage Conditions / Shelf Life 12 months from date of production if stored properly in original, unopened and undamaged sealed containers in dry conditions, at temperatures between +5°C and +30°C. Protect from frost.

Technical Data

Chemical Base Water based acrylic emulsion

Density (@ 20°C) ~ 1.09 kg/lt

Curing Efficiency (ASTM C-156)

	Loss off water g/100 cm ²	Loss of water compared to ASTM C309 (g / 100 cm ² 5.5 = 100%)	Loss of water compared to un- treated concrete 19.1 = 100%) (g/100cm ²
Sikafloor®- ColourSeal W	3.5	36.3%	8.16%

Solid Content ~ 29% (by volume) / ~ 30% (by weight)

Viscosity 1.36 cps (Brookfield spdl.3.500 rpm. +20°C)

Layer Thickness DFT: ~ 30 - 60 µm / coat

Mechanical / Physical Properties

Bond Strength (UNE - EN 13892-8)

Hardened concrete	Damp substrate	Dry substrate
C35 Concrete according to UNE - EN 1766	1.95 N/mm ²	2.15 N/mm ²

0.65 N/mm² (Applied to fresh concrete C35)

Persoz Film Hardness (UNE 48-024, ISO 1522)

Age of sample	7 days	14 days
Time	5 seconds	49 seconds

1 coat, 200 gr/m², 7 and 14 days at +23°C / 50% r.h.

Abrasion Resistance 5810 mg (UNE 48250-92 / ASTM D 4060)
Taber Abrader H-22, 1000 g, 1000 c (28 days / +23°C)

Resistance

Chemical Resistance The product is not intended for chemical exposure.

System Information

System Structure All applications 1 - 2 coats.

Application Details

Consumption / Dosage 0.1 - 0.2 lt / m² / coat. (5 - 10 m²/lt/coat)
To conform to ASTM C-309, ensure 0.2 lt / m² are applied.
This figure is theoretical and does not account for any additional material required due to surface porosity, surface profile, variations in level and wastage etc.

Substrate Quality *Fresh concrete:*
Surface must be absolutely free of bleed water and of sufficient strength to withstand finishing operations.
Hardened / old concrete:
Surfaces must be sound, open textured, clean, free from frost, laitance, surface water, oils, grease, coatings, all loosely adhering particles and other surface contaminants.
If in doubt, apply a test area first.

Substrate Preparation *Fresh concrete:*
The concrete must be prepared by suitable power or manual floating/tamping techniques.
Hardened / old concrete:
The substrate must be prepared by suitable mechanical preparation techniques such as high pressure water or abrasive blast cleaning equipment.
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 +10°C min. / +30°C max.

Ambient 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.

Application Instructions

Mixing **Sikafloor®-ColourSeal W** is supplied ready for use and only has to be thoroughly stirred as some settling of the pigments can occur.

Mixing Time 3 Minutes

Mixing Tools Electric stirrer with low speed (~ 300 rpm).

Application Method / Tools For fresh concrete, apply immediately after finishing techniques have been completed.
Apply in a continuous even film by air-less spray unit. The suitability of spraying equipment must be confirmed by trials.
Application is also possible by brush or roller.
To achieve the highest visual aesthetics and performance, a second coat is always recommended.
Wait for first coat to dry tack free before applying a second coat.

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

Waiting Time / Overcoatability Allow previous coats to become tack free before applying additional coats.

Substrate temperature	+10°C	+20°C	+30°C
Time	~ 50 minutes	~ 25 minutes	~ 20 minutes

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

Notes on Application / Limitations

In hot weather (above +25°C) store **Sikafloor®-ColourSeal W** in a cool place prior to use.

In low temperatures (below +10°C) the product may thicken and be difficult to spray.

Do not use sprayers, which have been used to spray silicones or release agents.

Do not mix differing formulations of Sika® or other curing membranes.

Ensure spraying equipment is cleaned thoroughly before use and residues of previous products are removed.

Sikafloor®-ColourSeal W must be removed prior to the application of a coating system.

Sikafloor®-ColourSeal W increases abrasion resistance compared to C25 concrete, but will gradually de-grade and be removed by environmental exposure conditions and trafficking.

Curing Details

Applied Product ready for use

Substrate temperature	+10°C	+20°C	+30°C
Foot traffic	~ 4 hours	~ 3 hours	~ 2 hours
Full cure	~ 24 hours	~ 20 hours	~ 16 hours

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

Cleaning / Maintenance

Methods

To maintain the appearance of the floor after application, **Sikafloor®-ColourSeal W** must have all spillages removed immediately and must be regularly cleaned using rotary brushes, mechanical scrubbers, scrubber dryers, high pressure washers, wash and vacuum techniques, etc., using suitable detergents and waxes.

Notes

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 should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

EU Regulation 2004/42 VOC - Decopaint Directive

According to the EU-Directive 2004/42, the maximum allowed content of VOC Product category IIA / i Type **wb**) is 140 / 140 g/l (Limits 2007 / 2010), for the ready to use product.

The maximum content of **Sikafloor®-ColourSeal W** is < 140 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 should 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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