Construction

Sikafloor®-2420

2-part epoxy impregnation and primer

Product Description

Sikafloor®-2420 is a two part, solvent containing, epoxy resin impregnation and primer.

Uses

- Primer for concrete and cementitious screeds
- Transparent seal coat for normal up to medium heavy wear
- Impregnation of concrete surfaces to protect from salt solutions / free thaw etc.

Characteristics / Advantages

- Low viscosity
- Good penetration abilities
- Also suitable also for less absorbent dense surfaces
- Easy application

Product Data

Form

Appearance / Colours

Resin - part A:	transparent, liquid
Hardener - part B:	transparent, liquid

Packaging

Part A:	5 kg, 10 kg containers
Part B:	5 kg, 10 kg containers
Part A+B:	10 kg, 20 kg ready to mix units

Storage

Storage Conditions / Shelf-Life

36 months 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.

Technical Data

Chemical Base

Epoxy

Density

Part A:	0.95 kg/l	(DIN EN ISO 2811-1)
Part B:	0.90 kg/l	
Mixed resin:	0.93 kg/l	

All Density values at +23 °C

Solid Content

~ 27% (by volume) / ~ 30% (by weight)

Resistance

Chemical Resistance

The product is not intended for exposure to chemicals.

Thermal Resistance

Exposure*	Dry heat
Permanent	+50 °C
Short-term max. 7 d	+80 °C
Short-term max. 12 h	+100 °C

Short-term moist/wet heat* up to +80 °C where exposure is only occasional (i.e. during steam cleaning etc.)

*No simultaneous chemical and mechanical exposure.

System Information

System Structure

Primer for Sikafloor® coatings:
1 - 2* x Sikafloor®-2420 +10 - 50 wt.-% Thinner C

Impregnation of concrete surfaces:
Min. 2* x Sikafloor®-2420 + 50 wt.-% Thinner C

Protection from salt solutions / freeze thaw:
2 - 3* x Sikafloor®-2420

*Always apply multiple coats “wet on wet” with the waiting time between coats: 15 - 30 minutes.

Application Details

Consumption / Dosage

Coating System	Product	Consumption
Primer, Impregnation	Sikafloor®-2420 optional diluted with 10 - 50% Thinner C	0.1 - 0.2 kg/m²

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

Substrate Quality

The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm^2) with a minimum pull off strength of 1.5 N/mm^2.

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

If in doubt apply a test area first.

Substrate Preparation

Concrete substrates must be prepared mechanically using abrasive blast cleaning 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	+10°C min. / +30°C max.
Ambient Temperature	+10°C min. / +30°C max.
Substrate Moisture Content	≤ 4% pbw moisture 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	Part A : part B = 50 : 50 (by weight)
Mixing Time	Prior to mixing, stir part A mechanically. When all of part B has been added to part A, mix continuously for 3 minutes until a uniform mix has been achieved. To ensure thorough mixing pour materials into another container and mix again to achieve a consistent mix. Over mixing must be avoided to minimise air entrainment.
Mixing Tools	Sikafloor®-2420 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, relative humidity and dew point. If > 4% pbw moisture content, Sikafloor® EpoCem® may be applied as a T.M.B. (temporary moisture barrier) system. *Primer:* Make sure that a continuous, pore free coat covers the substrate. Always apply the 1st coat of Sikafloor®-2420 by brush. The following coats can be applied by brush or roller. *Impregnation:* Apply the 1st coat of Sikafloor®-2420 by brush. The following coats can be applied by brush or roller. Avoid “puddling” on the surface with the primer. Do not apply Sikafloor®-2420 on bituminous substrates.
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

Temperatures	Time
+10°C	~ 10 hours
+20°C	~ 8 hours
+30°C	~ 4 hours

Waiting Time / Overcoating

Before applying Sikafloor®-coatings on Sikafloor®-2420 allow:

Substrate temperature	Minimum	Maximum
+10°C	30 hours	3 days
+20°C	24 hours	2 days
+30°C	20 hours	2 days

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

Notes on Application / Limitations

Do not apply Sikafloor®-2420 on substrates with rising moisture.

Freshly applied Sikafloor®-2420 must be protected from damp, condensation and water for at least 24 hours.

Avoid puddles on the surface with the primer

For external applications, apply on a falling temperature. If applied during rising temperatures “pin holing” may occur from rising air.

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

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

Temperature	Foot traffic	Light traffic	Full cure
+10°C	~ 36 hours	~ 5 days	~ 10 days
+20°C	~ 24 hours	~ 3 days	~ 7 days
+30°C	~ 16 hours	~ 2 days	~ 5 days

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

Legal Notes

Construction

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 Limited Watchmead Welwyn Garden City Hertfordshire AL7 1BQ United Kingdom	
04 [1)]	
EN 13813 SR-B1,5	
Primer/sealer (systems as per Product Data Sheet)	
Reaction to fire:	NPD_I [3)]
Release of corrosive substances (**S**ynthetic **R**esin Screed):	SR
Water permeability:	NPD
Abrasion **R**esistance:	NPD
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)] In Germany, DIN 4102 still applies. Passed class B2.

[3)] No performance determined.

[4)] Not broadcast with sand.

EU Regulation 2004/42

VOC - Decopaint Directive

According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / **h** type **sb**) is 750 / 750 g/l (Limits 2007 / 2010) for the ready to use product.

The maximum content of **Sikafloor®-2420** is < 750 g/l VOC for the ready to use product.

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ISO 14001 ISO 9001