BUILDING TRUST

PRODUCT DATA SHEET

Sikafloor® CureHard GL

Sealing lithium silicate based crystalline agent with high gloss

DESCRIPTION

Sikafloor® CureHard GL is water-soluble agent based on lithium silicate and acrylate dispersion for sealing and additional curing of existing power trowelled or polished/grinded concrete surfaces. Compared to similar products based on sodium or potassium silicate, that product in possible overdose is less prone to the formation of persistent efflorescence.

USES

Sikafloor® CureHard GL may only be used by experienced professionals.

Sikafloor® CureHard GL improves durability and tightness of concrete surface and gives the concrete surface silk gloss. Compared to current crystalline sodium or potassium based hardeners - the lithium based preparations eliminate occurrence of possible efflorescence on the concrete surface. The result of regular cleaning in the form of simple machine washing is high gloss of the flooring surface, which positively influences aesthetic quality of the work. Can be repeatedly used as floor maintenance agent, without additional mechanical substrate preparation.

CHARACTERISTICS / ADVANTAGES

Silicate component of the product - when applied onto concrete surface - penetrates into its texture, wherein it initiates chemical reaction and subsequent crystallization of reaction products which result in filling the concrete surface pores. Acrylic dispersion fills surface pores and this way reduces the absorption of the concrete during the first days after application. Sikafloor® CureHard GL bring followinh advantages when applied:

- appearance enhancement of concrete floors
- silk gloss
- dust reduction
- sealing and impregnation of concrete surface
- easier cleaning
- solvent free, no odour

APPROVALS / STANDARDS

Declaration of Performance
No. 020815010110000008180, certified by Factory Production Control Body No.1020 and provided with CE-mark. Surface Protection Product – Impregnation according to EN 1504-2. Intended Use – Table ZA.1b and 1.c of EN 1504-2:2004. Conforming to the Annex ZA Table ZA.3a.

PRODUCT INFORMATION

Chemical Base	Lithium silicate modified by acrylic resin.
Packaging	15 l container, 200 l drum
Shelf Life	12 months from date of production if stored properly in undamaged, unopened, original sealed packaging.
Storage Conditions	Storage at temperatures between +5°C and +30°C. Protect from direct sunlight, frost and contamination.
Appearance / Colour	Milky white liquid.
Density	~ 1.10 kg/litre (at +20°C)

Solid content by weight	~ 26 M.-%

TECHNICAL INFORMATION

Abrasion Resistance	Increased by 48 % compared to untreated sample	EN ISO 13892-4
Resistance to Impact	(class III: ≥ 20 Nm)	EN 6272-1
Tensile Adhesion Strength	≥1.0 MPa	EN 1542
Penetration Depth	≥5 mm	EN 1766
Water Absorption	<0,1 kg/m²h^{0,5}	EN 1062-3

APPLICATION INFORMATION

Consumption	0.05 – 0.10 l/m2 (i.e. 10 – 20 m²/l, on power trowelled concrete)
Ambient Air Temperature	≥2 °C
Substrate Temperature	≥5 °C
Waiting Time / Overcoating	See table below
Drying Time	The surface is touch-dry after 2 hours at +20 °C.

Temperature [°C]	Time [hour]
+5	~ 3.5
+10	~ 3.0
+20	~ 2.0
+25	~ 1.5

Where 2 coats are required to ensure maximum densification the second coat can be installed after the first one is dry. Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

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.

LIMITATIONS

Immediately wash over-spray from glass, aluminium or highly polished surfaces with water to avoid etching of surfaces. Do not use on ubstrates treated previously with curing agents, membrane forming sealers or asphalt until these layers have been removed completely. When applying, leave no dry spots in order to have homogenous performance. Performance enhancement of the substrates will vary greatly depending on the age, cement content, humidity content, porosity and penetration of the product into the substrate. Sikafloor® CureHard GL will not compensate very poor substrates with low cement content. It is not intended for substrates which are lightweight or extremely porous or
have worn (aggregate exposed) surfaces. Sikafloor® CureHard GL will not hide serious staining or excessive wear.

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

The content of VOC in Sikafloor® CureHard GL is <30 g/l for ready to use product.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

Sikafloor® CureHard GL is designed to be applied exclusively on hardened concrete/cementitious surfaces. Surfaces must be sound, clean, free from frost, laitance, surface water, oil, grease, coatings, all loosely adhering particles and other surface contaminants. If in doubt apply a test area first. For best results, concrete floors must be treated with Sikafloor® -CureHard GL at least 28 days after their placement or after the cement has had sufficient time to hydrate. Sikafloor® CureHard GL can also be applied on grinded/polished concrete or cement based screed surfaces, on concrete tiles or on stamped concrete surfaces.

APPLICATION

Sikafloor® CureHard GL must be applied in specified quantity by means of mechanical or manual pressure sprayer with adjustable nozzle. Immediately after that it should be evenly spread with a flat micro–fibre swab. Sealer reminders that are not well spread may cause white spots. To improve efficiency, achieve gloss and visual unification of the area second layer of the product should be applied the same way after the first one is dry. Thanks to proceeding chemical reaction the rate of water-tightness increases gradually, whereas maximum sealing and hardening effect occurs earliest after 7 days. To achieve high glossy surface additional polishing with soft PAD is possible. The surface must be absolutely dry in case of polishing; minimal 24 hours surface drying is a must. The product can be used in combination with Sikafloor® CureHard -24 and Sikafloor® CureHard LI.

CLEANING OF TOOLS

Flush sprayers and nozzles should be thoroughly cleaned with clear water. Do not use sprayers that were used for spraying with silicones or release agents (oils).

MAINTENANCE

CLEANING

To maintain the appearance of the floor after application, Sikafloor® CureHard GL 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.

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.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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