

1-Component Hybrid Coating based on silicium

Description

OBTEGO Concrete Coat Si is a one component hybrid coating for the protection of cementitious surfaces. The product is based on a new hybrid-binder technology. Coat Si is available in transparent and colored version.

Properties

OBTEGO Concrete Coat Si reacts with humidity and cures at room temperature. The product is free of solvents and plasticizers, diffusible and insensitive to surfaces with higher residual moisture. Compared to many other coatings Concrete Coat Si can be used both - indoors and outdoors. In case of mechanical damage, the product can be painted over at any time (provided that surface was cleaned).

The product protects the surface against the penetration of aqueous liquids as well as oils, fats and other dirt. Surfaces are therefore easier to clean.

The surface treatment OBTEGO Concrete Coat Si is suitable for a wide range of applications: from new concrete floors to inhomogeneous concrete surfaces to old concrete floors which has to be refurbished.

Application

OBTEGO Concrete Coat Si can be used on absorbent, monolithic concrete floors, screeds and self-leveling compounds, and much more. Onto extremely power trowelled and very dense floor surfaces limited use (may require grinding (e.g., #80 diamond metal segment) or choose another OBTEGO solution). Areas of application e.g. storage and logistics areas, production areas, workshops, etc.

Note: The product has very good resistance to many chemicals. A short test overview is listed in the OBTEGO Concrete Coat Si brochure. If there is intensive exposure to solvents or alkaline fluids, make a sample area and test its suitability. Due to the low layer thickness, the surface may need to be refreshed from time to time in areas with heavy wear.

Processing

The surface to be treated must be dry (<4CM-%), solid, clean, absorbent and free of sinter layers, oil, grease and other contaminants that act as release agents. The surface to be treated must be dry, solid, clean, absorbent, free of interlayers, oil, grease, and other contaminants that act as release agents. Application on a substrate with slightly increased residual moisture is generally not a problem but should be tested beforehand if you are inexperienced in using the floor surface. Especially with fast-drying screeds, salt efflorescence can lead to adhesion problems. To prepare the surface, at least intensive wet cleaning with coarse (e.g. black) cleaning pads is required. Due to salt efflorescence, rapid screeds require repeated wet cleaning. In the case of hard sinter layers or very dense surfaces, grinding or brushing (steel brushes) has to be required.

After grinding/brushing the surface must be wet cleaned several times with a scrubber-dryer. If there is significant porosity, cavities, or small chips, these must be filled beforehand. For sanded floors, use OBTEGO SP-100 or scratch coat.

To determine consumption, it is recommended to create a separate sample area of the same surface. Stir the one-component product in the delivered container well with an electric stirrer before use. (Be careful of sediment!)

Repot the required amount into a separate bucket. Close immediately the original container to avoid skin formation on the material surface due to humidity!

The product should be applied homogenously to the floor with a short-pile roller (microfiber or nylon, e.g. pile length 6-10mm) (use paint grid!). For a uniform result, usually two pass in a crosswise application is sufficient. Allow drying time between the two applications. It is generally recommended that a second person roll over the surface to avoid roller marks or streaks. The drying time between the two coats is approximately 1-3 hours, depending on the temperature conditions. If conditions on site are unfavourable, a longer drying time is to be expected. Depending on the substrate, slight roller marks or streaks cannot be ruled out in scattered light.

For large areas, spray application with an airless device is also possible. Rolling with a roller is mandatory. Specifications for airless devices are available from OBTEGO on request.

Note: Protect adjacent surfaces against splashes. Clean tools and equipment with a suitable solvent (e.g. acetone, ethyl acetate, alcohols, etc.).

Processing temperature

Avoid direct sunlight during application. The temperature of the surfaces to be treated should be between 10°C and 25°C. Allow for longer drying times at cool temperatures. However, do not use below 3°C. Protect fresh surfaces from condensation and other direct water exposure.

Drying time

The drying time (walk-on) is approx. 2-3 hours. Depending on the ambient temperature and humidity, the drying time may vary. Mechanically resilient after approx. 48 hours.

Ensure adequate ventilation during drying. The finished surfaces must be protected from too much moisture and especially water until they have hardened sufficiently (3 days). The use of highly alkaline basic cleaners should be avoided within the first 6 months. Even later, only use alkaline cleaners in small doses if necessary.

If the treated floor needs to be covered, this may only be done with a vapor-permeable cover and after it has completely dried (2-3 days). Recommendation: breathable fleece. If necessary, additionally with hardboard or generally with a diffusion-permeable protective cover such as Hammerfest from the company "Protect & Cover" or comparable.

Productiveness

Use the following values as references depending on absorbency.

Power trowelled surfaces: approx. 0,15–0,25 kg/m² (for 2 coats)

Rough surfaces: approx. 0,25–0,35 kg/m² (for 2 coats)

OBTEGO Concrete Coat Si

Storage

Protect from freezing. Store closed in a dry place; storable for approx. 12 months in original container at 10 - 25° Celsius.

Environmental Protection

Not empty into drains.

Water hazard class: WGK 1 (slightly hazardous to water).

Waste codes/waste designations according to EWC/AVV:

08 02 99 Wastes not otherwise specified. Dispose of waste according to applicable legislation. Completely emptied packages can be recycled.

Safety

OBTEGO Concrete Coat Si is non-hazardous to health when dry. Ventilate during and after working. Material safety data sheet available for professional users upon request.

Ingredients: Binder, silane, pigments (colored version), filler

Classification and Labelling according to Regulation (EC) No. 1272/2008

[CLP]:



Warning

May cause an allergic skin reaction. Causes serious eye irritation.

Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention.

GISCODE: RSP25 SMP-based coating materials, labelled

Identification marking for transport:

PU	PU marking	Transport documents
a	none, no dangerous goods	none, no dangerous goods

Packaging Unit (PU)

a) 12 kg hobbock (other container sizes available on request)

colors:

transparent, window grey, silver grey, signal grey, dust grey, basalt grey, pebble grey, signal yellow, white (no RAL colors)

This information should only be a non-binding advice. The use of the products is based on local circumstances and on the surface itself. If there is no experience, and in cases of doubt, we recommend to try the product on an inconspicuous spot.