

Special sealer for cementitious surfaces and natural stone (with color enhancement)

Description

OBTEGO® R-400 is a solvent-borne, silane-based special sealer with an excellent water and oil repellent effect.

Properties

OBTEGO® R-400 reduces the penetration of aqueous liquids, grease, oils, and other dirt. The effectiveness depends on the flooring material and absorption of the surface. Depending on type of surface and surface preparation, it can come to a different result in stain protection performance, as well as to a different appearance (color enhancement) of the floor. At the same time, the surface can be strongly darkened in the case of an exceeding color saturation. The water absorption is strongly reduced, while the water vapor permeability is only marginally affected. The active ingredients are UV-resistant and non-yellowing.

Scopes of Application

OBTEGO® R-400 is applied on all grinded and non-grinded cementitious floors, as well as industrial artificial stone/Terrazzo, screeds, etc., or rather on granite, gneiss, quartzite, sand stone, travertine, marble, limestone, and shale. Fields of application are e.g., industrial floors in commercial establishments, market halls, shopping malls and supermarkets in the indoor and outdoor use. Fields of application for natural stone surfaces treated with OBTEGO® R-400 are e.g., countertops, tables, window seats, stairs, and natural stone tiles for walls and floors in the indoor and outdoor use. For highly absorbing surfaces or undesired color enhancement, a pre-treatment with OBTEGO® P-10 or P-20 is recommended. Also, the use of a silicate (densifier) as a primer prior to the R-400 application can be recommended on cementitious floorings.

Note: The acid sensitivity of the surface still remains, but it is reduced. Only limited use of R-400 on soft or scratch sensitive floors. The use of a silicate prior to R-400 can significantly improve the scratch resistance, but not turn a poor-quality floor into a very good one.

Processing

The treated surface must be dry (residual moisture < 6%), firm, clean, absorbent, free from oil, grease, releasing agents and any other impurities. At least an intensive cleaning of the surface with an auto-scrubber machine and clear water is required. For a better surface appearance and finish a diamond cleaning step with resin bond diamond tool or diamond grinding pads with grit size #100 or #200 is recommended. To ascertain the consumption, make a separate sample area of the same surface. Apply R-400 with a pressure-sprayer and spread with a short-hair microfiber mop. On highly absorbing surfaces a repeated application is required. The surface must be saturated with R-400 (slightly, smeary oil film). Burnish the surplus material film after 2-10 minutes into the floor. Use therefore a single-disc buffing machine or for larger areas a power trowel machine with a soft (white) polishing pad. A nice and uniform gloss film is formed. Do not allow excess product to dry on the surface.

Note: Protect adjacent, solvent-sensitive surfaces against splashes. Remove excess material before curing. Clean used tools with thinner or alcohol (spirit). Do not use cellulose thinner or acetone.

Processing temperature

Avoid direct sun radiation during processing. The surface temperature should be between 10 °C and 25 °C (50 – 77 F). Turn off floor heating system. Avoid the direct impact of moisture until the complete water and oil repellency is developed.

Drying time

The water and oil repellent effect develops after 2-3 hours, the complete effectivity occurs after 24-48 hours. The surface treated with OBTEGO® R-400 is walkable after approx. 7 hours. According to ambient temperature, humidity and ventilation drying time can be varying.

If the floor must be temporary protected, use only diffusion open coverings and also only after the floor is completely dried. Recommendation: Diffusion open fleece (non-woven fabric). If necessary, to protect more use additional wooden hardboards/fibreboards on top or generally with diffusion-open protective and laying floor such as Hammerfest from the company "Protect & Cover" or comparable.

Productiveness

Depending on the surface absorption, the following values can be assumed. A second application halves the coverage. Reference values:

polished/fine-grinded surfaces: approx. 20 – 50 m²/liter
 rough/non-grinded surfaces: approx. 10 – 20 m²/liter

Using a pre-treatment with OBTEGO® P-10, P-20 or the use of a silicate (densifier), reduce the consumption of R-400 on highly absorbent floorings.

Storage

Shelf-life in cool, dry and closed container is about 12 months. Opened containers should be used up as soon as possible.

Environmental Protection

Contains solvents (ethyl alcohol). The product is free of hydrocarbons. Do not discharge into drain system/surface waters/groundwater. The product is weakly water-polluting (WGK 1).

Waste codes/waste designations according to EWC/AVV. 08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances. (*Evidence for disposal must be provided.) Dispose of waste according to applicable legislation. Completely emptied packages can be recycled.

Security

OBTEGO® R-400 is harmless to health after curing. A good ventilation should be provided during and after the processing. Notice the special precautions, if the product is used in spraying application. The safety data sheet is available for professional users on request.

Ingredients: Toluene, methanol, trimethoxy(methyl)silane

Labelling according to Regulation (EC) No. 1272/2008 [CLP]. Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/ vapors/spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Identification marking for transportation:

PU	PU-marking	Transport documents
a	class 3, UN 1170	yes, UN 1170, class 3, PG II; Ethyl Alcohol Solution

Packaging Unit (PU)

10 liter PE canister

(Bigger containers and barrels have to be inquired)

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.