

## Pigmented 2-Component Lithium Silicate-Based Impregnating Sealer

### Description

OBTEGO® R-40 is a two-component, pigmented, highly reactive hybrid lithium silicate for the protection of cementitious surfaces.

### Properties

OBTEGO® R-40 penetrates into the surface, where it reacts with the substrate to form a solid unit. Wear resistance is improved and surfaces become dust-free, more waterproof and thereby more resilient after the treatment with OBTEGO® R-40.

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

Given to the pigmented surface finish, OBTEGO® R-40 is ideally suited for use on new, uneven concrete surfaces or old coverings that are in need of renovation.

### Applications

OBTEGO® R-40 is intended for use on absorbent, monolithic concrete floors and screeds. On highly trowelled floors limited usable (maybe grinding necessary or select another OBTEGO solution). Application areas include, for example, warehouse and logistics areas, production areas, workshops, etc.

**Notice:** The acid sensitivity of the surface is greatly reduced. However, there is no acid protection, as is the case with an EP coating, as the impregnation is only slightly film-forming.

Due to the limited pigment film, the surface may need to be refreshed from time to time in very heavily used areas. OBTEGO® R-40 is not permanently water resistant.

### Processing

The surface to be treated must be dry, firm, clean, absorbent, free of sintered layers, oil, grease and other contaminants that act as a release agent. Preparation of the substrate requires at least an intensive wet cleaning with rough (e.g., black) cleaning pads. With stubborn efflorescence or sintered layers grinding or brushing (steel brush) of the floor surface is necessary. After grinding/brushing wash the surface several times with an auto-scrubber machine. Residual moisture must be measured before applying the product. The residual moisture must be <4 CM%, otherwise coloring differences could appear later (patchiness). No rising moisture (according to ASTM D4263 (PE-foil test)). (TRAMEX device < 6% display value).

To determine how much product will be required, it is recommended to prepare a separate sample surface of the same substrate. Using an electric stirrer, mix the two-component product (components A+B) in the mixing ratio as supplied. Briefly stir or shake components A and B before mixing. **While continuously stirring, slowly** mix Component B into Component A, and then continue mixing together for another 3 minutes.

**OBTEGO® R-40 must be used within 60 minutes after mixing. Do not work with older material!**

The product is to be evenly applied to the floor by using a short-pile nylon roller (e.g., pile length 8mm). Using a grid to wipe off excess! For uniform results, apply a second coat in crosswise direction to the first. Drying time between the two coats, depending on temperature conditions, is about 1–3 hours. If the conditions on site are unfavorable, a longer drying time is to be expected.

**Caution:** Protect adjacent surfaces against splashes. Clean working equipment immediately with water.

### Working temperature

Avoid working in direct sunlight. The temperature of the surface to be treated should be between 10 °C and 25 °C. Surface temperature must be 3°C over dew point. While curing, the relative air humidity must not exceed 70%. Protect fresh surfaces against dew and other sources of moisture.

### Drying time

Drying time (until ready to walk on) is about 4–5 hours. The drying time can differ depending on ambient temperature and air humidity. Ready for traffic after 48 hours.

Ensure adequate ventilation while drying. The finished surfaces must be protected against moisture and especially direct wetness until sufficiently hard (7 days). Use of highly alkaline basic cleaners should be avoided for the first 6 months. After this period, only use alkaline cleaners at low concentration if necessary.

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.

### Economy

Use the following values as references depending on absorbency. Guidelines:

Power trowelled surfaces: approx. 0.2–0.35 kg/m<sup>2</sup> (for 2 coats)  
 Rough surfaces: approx. 0.30–0.35 kg/m<sup>2</sup> (for 2 coats)

### Storage

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

**Environmental protection**

Avoid discharge into drains. Water hazard class WGK 1 (low hazard to waters).

Waste codes/waste designations according to EWC/AVV.

Component A: 08 02 99 wastes from MFSU of other coatings (including ceramic materials): Wastes not otherwise specified. Dispose of waste according to applicable legislation. Completely emptied packages can be recycled.

Component B: 08 02 99 wastes from MFSU of other coatings (including ceramic materials): Wastes not otherwise specified. Dispose of waste according to applicable legislation. Handle contaminated packages in the same way as the substance itself.

**Safety**

OBTEGO® R-40 is non-hazardous to health when dry. Ventilate during and after working. Material safety data sheet available for professional users upon request.

Ingredients:

Component A = 3-Glycidyloxypropyltrimethoxysilane, potassium methylsilanetriolate.

Component B = 3-Glycidyloxypropyltrimethoxysilane, methanol

Labelling according to Regulation (EC) No. 1272/2008 [CLP].

Component A: Causes skin irritation. Causes serious eye damage. Do not breathe dust/fume/gas/mist/vapours/spray. 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. If skin irritation occurs: Get medical advice/attention.

Component B: Causes serious eye damage. Wear eye/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

**Packaging units (PU)**

Component A: 18,3 kg bucket

Component B: 0,366 kg bottle

Colours: Platinum grey, Slate grey (no RAL colors)

This information is non-binding advice only. The customer must validate the applicability of our products under the local conditions and for the surfaces to be treated. In the case of unfamiliarity or if in doubt, test the product in an inconspicuous place before applying.