Technical Datasheet



ISOCURE-SB

Acrylic sealing and anti-evaporation agent for concrete

Description

Solvent-based polymer emulsion with acrylic resins applied to freshly casted concrete to prevent rapid evaporation of mixing water from fresh concrete surfaces. Protects both fresh and hardened concrete.

Offers the following advantages:

- Significant water loss reduction and high moisture retention.
- Effective curing and sealing of concrete surfaces.
- · High abrasion resistance.
- Excellent adhesion to old and new concrete.
- Water-repellency and protection against water penetration.
- Shrinkage reduction during concrete setting.
- Hairline crack resistance.
- Surface dust formation is reduced after concrete setting.
- Compatibility with surface hardeners, such as EXTRA-TOP.
- Suitable for indoor and outdoor use.
- Easy application by spray or roller.

Certified according to EN 13813 and classified as composite decking, category SR-B2.0-AR0.5. ISOCURE-SB complies with the requirements of ASTM C 309-11 for a liquid membrane-forming compound for curing concrete, type 1, class B, meeting the maximum 72-hour water loss requirement of ≤0.55 kg/m² (ASTM C 156). According to the test report of the Danish Technological Institute, the indicative water loss rate of ISOCURE-SB is 0.46 kg/m² (Certificate No.: 790141).

Fields of application

ISOCURE-SB is used as an anti-evaporation agent for fresh concrete and as a surface hardener for existing brittle floors and surfaces in order to increase their abrasion resistance and reduce wear.

It is particularly useful on large surfaces of exposed concrete, such as industrial floors, car parks, concrete slabs, etc. Also suitable for vertical surfaces.

Technical data

Consistency: solvent-based,

acrylic resins

Color: transparent Density: 0.9 ± 0.03 kg/l Solids content: $\sim 22\%$ (by weight)

Adhesive strength: ≥ 2 N/mm²

(concrete failure)

Abrasion strength

(EN 13892-4, BCA): $\leq 50 \mu m$, AR0.5

Foot traffic: after at least 1 h

(at 23 ± 2°C and 50 ± 5% RH)

Recoat time: 25 min at +20°C

(substrate temperature)

Directions for use

1. Substrate preparation

Fresh concrete:

ISOCURE-SB is applied on the surface of the fresh concrete, right after smoothing it out with a power trowel.

Hardened concrete:

The surfaces to be treated must be:

- dry and stable;
- free from materials preventing adhesion, such as dust, loose material, etc.

Moreover, depending on the nature of the substrate, it should be properly prepared by brushing, grinding, milling, sandblasting, water blasting, shot blasting, etc. Following this, the surface should be thoroughly cleaned from dust using a high suction vacuum cleaner.



ISOCURE-SB

2. Mixing

ISOCURE-SB is a ready-to-use product. Mix for about 2-3 minutes using a low speed mixer (300 rpm).

3. Application

ISOCURE-SB can be applied using a spray or a special varnish roller in one layer or two for a better result. The second layer is applied after the first one has dried.

Tools should be cleaned with the special solvent SM-28 while ISOCURE-SB is still fresh. If material is hardened, tools can be mechanically cleaned.

Consumption

100-200 ml/m²/layer, depending on application conditions.

Packaging

Supplied in 20 I and 200 I containers.

Shelf life - Storage

12 months after production date if stored in original, unopened packaging at temperatures ranging from +5°C to +25°C. Protect the product from direct sunlight and frost.

Remarks

- ISOCURE-SB has a high solvent content.
 When applied indoors, ensure proper ventilation.
- In case of overcoating, old coating layers must be removed by grinding the concrete surface, e.g., using a terrazzo polishing machine.
- The temperature of the substrate must be at least 3°C above the dew point to avoid condensation.

Volatile Organic Compounds (VOCs)

According to Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type SB is 750 g/l (2010) for the ready-to-use product. The ready-to-use product ISOCURE-SB contains a maximum of 750 g/l VOC.



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EN 13813 SR-B2.0-AR0.5

Synthetic resin screed material for use internally in buildings

DoP No.: ISOCURE-SB/1611-01

Reaction to fire: Ff

Release of corrosive substances: SR

Water permeability: NPD Wear resistance: AR0.5

Adhesion: B2.0

Sound insulation: NPD Sound absorption: NPD Thermal resistance: NPD Chemical resistance: NPD

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