

PRODUCT DATA SHEET

SikaSeal[®]-105 BR

PROTECTIVE CEMENTITIOUS COATING

DESCRIPTION

A cementitious polymer modified, 2 components protective coating, combining pore block crystallization action and polymers to enhance resistance to air born chlorides and gases. It acts as a thin layer coating material for concrete and renders with excellent protection properties.

USES

Sika Cem Gard[®] -BR2 is an economical protective coating for external and internal application of civil structures: above & below ground. It is used as well for sealing hair line cracks in concrete not subject to movement, in marine areas, to protect concrete in :

- Bridges
- Sea walls
- Facades
- Balconies
- Walkways
- Concrete exposed to chloride or sulphate environments.

Sika Cem Gard[®] -BR2 is also used for protection of water containment structures.

CHARACTERISTICS / ADVANTAGES

Sika Cem Gard[®] -BR2 offers the following advantages:

- Pre-batch components (No added water).
- Brush, roller applied or sprayable.
- High adhesion to prepared substrates.
- Low consumption per M².
- Slightly Flexible.
- Crystallization pore blocking action.
- Good abrasion resistance.
- Improves concrete/masonry appearance.
- Non-toxic, vapor permeable, allowing substrate concrete to breath.
- May be applied to green concrete.

APPROVALS / CERTIFICATES

Sika Cem Gard[®] -BR2 has been tested as per SCAQMD Rule 1168'
Result VOC Content < 5 g/L

PRODUCT INFORMATION

Composition	Comp. (A) liquid Comp. (B) powder
Packaging	30 kg (Comp (A+B))
Appearance / Colour	Grey and light Grey (other colors available upon request).
Shelf life	12 months when un-opened and stored as recommended.
Storage conditions	Store dry in pallets, off the ground, in the shade.
Density	Comp. (A + B) ~ 1.7 kg/l

TECHNICAL INFORMATION

Compressive Strength	30 – 35 N/mm ² (after 28 days)	(ASTM-C-942-94)
Tensile Strength in Flexure	10 – 14 N/mm ² (after 28 days)	
Bond Strength in Shear	7 – 8 N/mm ² (after 28 days)	

APPLICATION INFORMATION

Mixing Ratio	Comp (A) : Comp (B) = 1:2 by weight
Waiting Time / Overcoating	Open Working Time 30 minutes at 20 - 23°C.

APPLICATION INSTRUCTIONS

MIXING

- Mixing Place ¾ of comp. (A) (liquid) into a suitable mixing container, add comp.
- (B) (powders) to the liquid while mixing.
- Mechanical mixing must be used to ensure complete dispersion of the powder component, add the remaining liquid and mix for an additional three minutes, during this process, you may adjust the consistency by adding gradually the final additional liquid.

APPLICATION

Coverage

A minimum of 2 coats always required. Approximate 1.2 to 1.7 kg/m². Subject to concrete porosity and conditions. Site samples are always recommended to fix actual consumption per m².

Surface Preparation

Concrete, Mortar & Masonry surfaces must be clean, sound, level and uncontaminated by oil or grease, remove cement laitance, form work traces and loosely adhering particles by sand blasting or high pressure water jet. Small areas may be prepared via wire brush or surface grinding. Make good honeycombing and other imperfections using Sika Rep repair mortar, for small bug holes & surface unevenness, use Sika Cem Gard® -BR2 in paste form. (Mixing ratio 1 : 4.5 or 1 : 5). Concrete surfaces are to be pre-saturated with water to S.S.D. condition.

Application

Sika Cem Gard® -BR2 can be applied by trowel, stiff bristle or spray equipment.

- While the concrete substrate is still in a S.S.D. condition, apply the first coat and leave to harden (4 to 6 hours). Apply the second coat as soon as possible, after hardening.
- Additional coatings may be applied subject to estimated severity of the local conditions.
- After application of the final coating, smooth down the surface of Sika Cem Gard® -BR2 with a soft dry sponge.

CURING TREATMENT

To ensure optimal performance of Sika Cem Gard® -BR2:

- Mist water cure for a 48 hours period to initiate the pore blocking crystallization process is recommended.
- If this is not possible resistance will be provided by the liquid polymer contained in the Sika Cem Gard® -BR2 coating.

CLEANING OF EQUIPMENT

Clean all tools with water immediately after use. Hardened material can only be removed by mechanical means.

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.

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.

ECOLOGY, HEALTH AND SAFETY

- **Ecology** Do not dispose into water or soil but according to local regulations.
- **Transport** Non hazardous.
- **Safety precautions** Wear gloves & goggles, in case of contact with eyes or mucous membrane, wash with clean waters. Seek medical attention.
- **Toxicity** Non-toxic under relevant health and safety codes.

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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