BUILDING TRUST
CONSTRUIRE LA CONFIANCE

PRODUCT DATA SHEET

# Sikagard® SN-100

Water-repelling sealer

## PRODUCT DESCRIPTION

Sikagard® SN-100 is an advanced generation of highly penetrating, clear, monomeric silane sealer. Using proven technology, the material has been formulated to be VOC compliant while providing an integral barrier against the ingress of moisture and water-borne salts into concrete and masonry.

## WHERE TO USE

- Civil engineering structures: Suitable for use on exposed horizontal and vertical surfaces including bridges and parking decks, barriers, abutment walls and other marine structures
- To prevent the deterioration arising out of soluble salts and freeze/thaw cycles damages in reinforced concrete and porous block or brickwork
- To help prolonging the design or service life of buildings and civil engineering structures

## CHARACTERISTICS / ADVANTAGES

- Easy to apply for an economical application
- Deep penetration protects it from weathering, ultraviolet rays and abrasion
- Reduces water absorption for better protection in splash zones and against driving rain
- Reduces chloride ion intrusion and its negative effects through repelling of water
- Can be integrated to corrosion management programs to expand service life for reinforced concrete
- Does not create a vapour barrier, allowing treated surfaces to “breathe”
- Lasts for many years; providing a long-term, cost effective solution
- Ministère des Transports et de la Mobilité durable (MTMD) of Quebec acceptance
- Alberta Transportation approved as a Type 1c concrete sealer for use on new bridges and overlays
- VOC compliant; satisfying Environment Canada regulations
- Product recognized by the British Columbia Ministry of Transportation (BC MoT)

## PRODUCT INFORMATION

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| **Packaging** | ▪ 18.9 L (5 US gal) pail<br>▪ 205 L (54.2 US gal) drum |
| **Colour** | Clear |
| **Shelf Life** | 24 months in original, unopened packaging |
| **Storage Conditions** | Store in dry condition, at temperatures between -18 °C and 30 °C (0 °F and 86 °F). Condition material between 10 °C and 30 °C (50 °F and 86 °F) prior to use |
| **Density** | 0.88 kg/L (7.3 lb/US gal) |

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| **Viscosity** | 5 – 10 cps |
| **Active Content** | 100 % |
| **Air quality and emissions** | Contributes towards satisfying LEED® v4 EQ Credit - Low-Emitting Materials |
| **Climate** | Contributes towards satisfying LEED®v4 MR Credit - Building Product Disclosure and Optimization – Environmental Product Declaration |
| **Yield** | 4.9 – 8.8 m²/L (200 – 360 ft²/US gal) depending on the substrate quality and porosity<br><br>**Alberta Transportation Specification:** Type 1c: 158 mL/m² [equivalent to 6.33 m²/L (257 ft²/US gal)] |
| **Curing Conditions** | The reaction of the residual silane monomer with the substrate will take at least 24 hours at a temperature of 25 °C (77 °F). Cure time is considerably longer at colder temperatures. |

## BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

## WHERE TO USE

Sikagard® SN-100 is best applied onto 28 day old concrete or older, however, due to its high alkali resistance it is possible to apply it earlier, though lower penetration might be expected. Contact Sika Canada Technical Service for more detailed information.

- Sikagard® SN-100 may be applied at temperatures down to -10 °C (14 °F), providing the surface is ice-free/frost-free, though lower penetration might be expected.
- Not recommended for exterior applications if rain is expected within 12 hours.
- Not intended for waterproofing under hydrostatic pressure, in permanent contact with water or for below ground waterproofing.
- Not intended to seal visible cracks from moisture ingress.
- Building materials that are not to be treated, such as window frames and glazing, must be protected from contact with the product. In case of splashes, clean immediately using clean water and a squeegee.
- Some coatings and bituminous materials may be damaged by the Sikagard® SN-100; care is required during application or protection against contact may be necessary.
- Surfaces treated with Sikagard® SN-100 cannot be overcoated with either cement or lime-wash based paints.
- Sikagard® SN-100 is clear and typically “invisible” to the eye once cured and dried, however if there are strict aesthetic requirements (for example on natural stone) it is recommended to undertake preliminary trials as slight darkening of some surfaces may occur.
- Do not let dry excess material, darkening, change of colour or appearance of substrate may occur.

### SUBSTRATE QUALITY

All surfaces must be clean, structurally sound, frost-free and dry (maximum depth of penetration is achieved when substrates are dry, with no damp patches).

### SUBSTRATE PREPARATION

Any existing coatings, surfaces treatments, accumulated pollutants, dust, dirt, oil and efflorescence must be removed. A substrate clogged with dirt or oil will not permit proper sealer penetration. Usually no preparation is required for uncoated building envelopes. Uncoated surfaces must be free from curing compound residues and any material or contaminants detrimental to penetration. Best results are achieved when Sikagard® SN-100 is applied onto 28 day old or older concrete, however, due to its high alkali resistance, it is possible to apply it earlier, consult Sika Canada Technical Service for more information.

All substrates requiring preparation, such as contaminated surfaces or horizontal concrete slabs, must be properly cleaned before the sealer is applied. This is best achieved using light sand-blasting, shot-blasting or high pressure water blasting. Allow adequate time for surfaces to dry (for best penetration) before proceeding with application.

### MIXING

Stir material to ensure the material if fully blended and of uniform consistency using a slow-speed (300 – 450 rpm) drill, fitted with a "*Jiffy*" style paddle.

## APPLICATION

**Vertical Surfaces:** Apply Sikagard® SN-100 using a brush, roller or low pressure spray (*Chapin Viton*™ or similar), working from top to bottom by maintaining a 300 mm (12 in) curtain (run down). When applying the material on a vertical surface, avoid accumulation and run-off of the material. In the event of material accumulation or run-off lines being formed, redistribute the material on the surface or remove by sponging. In most cases, the flood coat should be applied in two (2) passes, “wet on wet” with the second pass at right angles to the first. Material coverage should not exceed 4.9 $m^2$/L total (200 $ft^2$/US gal) in order to achieve the desired effect.

**Horizontal Surfaces:** Apply Sikagard® SN-100 using a roller or low pressure spray (*Chapin Viton*™ or similar), ensuring that product penetrates the substrate and does not “pond” or “puddle” on the surface. If ponding occurs, make sure to redistribute or remove the excess material on the surface before material starts to dry anf form a film that will prevent penetration of excess material. Material coverage should not exceed 4.9 $m^2$/L (200 $ft^2$/US gal) in order to achieve the desired effect. Where working on a horizontal surface the flood coat should be applied in two (2) passes, “wet on wet” with the second pass at right angles to the first.

Complete and correct coverage of surfaces is crucial to the success of such sealers.

## CLEANING

Clean equipment with xylene. Cured product can only be removed mechanically.

# LEGAL NOTES



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