BUILDING TRUST CONSTRUIRE LA CONFIANCE



PRODUCT DATA SHEET

Edition 12.2017/v1 CSC Master Format™ 07 19 16 SILANE WATER REPELLENTS

Sikagard® SN-40 Lo-VOC

WATER-REPELLING SEALER

Description	Sikagard® SN-40 Lo-VOC is an advanced generation of highly penetrating, water-repelling silane sealer. Using prove technology, the material has been formulated to be VOC compliant while providing an integral barrier against the ingres of moisture and water-borne salts into concrete and masonry.
Where to Use	 Building facades and civil engineering structures. Suitable for use on exposed horizontal and vertical surfaces including bridges and parking decks, barriers, abutmen walls and marine structures. Prevention of deterioration arising out of soluble salts and freeze/thaw damage in reinforced concrete and porou block or brickwork.
	 To help prolonging the design or service life of buildings and civil engineering structures.
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 part of corrosion management program to expand service life for reinforced concrete. Not a vapour barrier allowing treated surfaces to "breathe". Lasts for many years; providing a long-term, cost effective solution. Ministry of Transport Québec acceptance. Approved by Alberta Transportation as a Type 1a and 1b concrete sealer for use on traffic bearing surfaces. Complies with Environment Canada VOC regulations. Product recognized by the British Columbia Ministry of Transportation(BC MoT).
	Technical Data

200 L (52,9 US gal.) drum

Colour Clear liquid

Walls and building envelopes: 2.5 m²/L (100 ft²/US gal.) Yield Concrete decks: 4.4 m²/L (180 ft²/US gal.)

Alberta Transportation Specification:
Type 1a: 320 mL/m² [equals to 3.12 m²/L (127 ft²/US gal.)]
Type 1b: 224 mL/m² [equals to 4.46 m²/L (181 ft²/US gal.)]

Note: coverage rates will greatly vary depending on the porosity and profile of the substrate. Test sections

are always recommended to confirm rate of application

2 years in original, unopened packaging. Store between -18 and 30 °C (0 and 86 °F). Condition material between 10 and 30 °C (50 and 86 °F) prior to use. **Shelf Life**

Application Temperature (ambient & substrate) Minimum -10 °C (14 °F)

Drying Time Sikagard® SN-40 Lo-VOC loses its solvent very rapidly after application. However, the reaction of the residual

silane monomer with the substrate will take at least 24 hours at a temperature of 25 °C (77 °F). Drying is considerably longer at colder temperatures.

Properties at 25 °C (77 °F) and 50 % R.H.

Active Ingredients 40 %

Density 0,86 kg/L (7.2 lb/ US gal.) Viscosity

VOC Content 333 g/L

Consult Sika Canada **Chemical Resistance**

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.

HOW TO USE

Surface Preparation

All surfaces must be clean, sound, frost free and dry (maximum depth of penetration is achieved when substrates are dry, with no damp patches). 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-40 Lo-VOC is applied onto 28 days old or older concrete, however, due to its high alkali resistance, it is possible to apply it earlier, consult Sika Canada for more information.

1/2 7-175 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 grinding, 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

Sikagard® SN-40 Lo-VOC is supplied ready for use and **must not be diluted**. Stir thoroughy to ensure the material if fully blended and of uniform consistency using a slow-speed (300 - 450 rpm) drill and *Jiffy*-style paddle.

The material is supplied optionally with a Caustic Soda catalyst to improve its performance when applied onto aged or carbonated concrete. Add 600 mL (20 US fl. oz) of Caustic Soda to a 18.9 L (5 US gal.) unit of Sikagard® SN-40 Lo-VOC. The catalyst should be added and stirred thoroughly until fully blended. The blended material must be used within 24 hours following the catalyst addition.

Note: It is important to keep the product (with or without catalyst) fully agitated. Re-stir frequently the material to ensure a uniform consistency of the material throughout the application.

Application

Vertical Surfaces: Apply Sikagard® SN-40 Lo-VOC using a brush, roller or low pressure spray, working from top to bottom by maintaining a 30 cm (12 in) parallel 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 be greater than 2.5 m²/L total (100 ft²/US gal.) in order to achieve the desired effect.

Horizontal Surfaces: Apply Sikagard® SN-40 Lo-VOC 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 be greater than 4.4 m²/L (180 ft²/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.

Clean Up

Uncured material can be removed using Sika® Epoxy Cleaner or mineral spirits. Cured product can only be removed mechanically. Wash soiled hands and skin thoroughly in hot soapy water or use Sika® Hand Cleaner towels.

Limitations

- Sikagard® SN-40 Lo-VOC 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 for more detailed information.
- Can 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 not to be treated (e.g. window frames and glazing) must be protected from contact. In case of splashes, clean immediately using clean water and a squeegee.
- Some coatings and bituminous materials may be damaged by the Sikagard® SN-40 Lo-VOC; care is required during application or protection against contact may be necessary.
- Surfaces treated with Sikagard® SN-40 Lo-VOC cannot be overcoated with either cement or lime-wash based paints.
- Sikagard® SN-40 Lo-VOC 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 color and appearance of substrate may occur.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN FOR INDUSTRIAL USE ONLY

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, within their shelflife. 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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

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