



STICKS & STONES

BUILDING SOLUTIONS

PRODUCT DATA SHEET

Edition 03.2018/v1 SILANE
WATER REPELLENTS

Advanced Generation Sealer

Lo-VOC WATER-REPELLING SEALER

Description	Our product is an advanced generation of highly penetrating, water-repelling 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	<ul style="list-style-type: none">▪ Building facades and civil engineering structures.▪ Suitable for use on exposed horizontal and vertical surfaces including bridges and parking decks, barriers, abutment walls and marine structures.▪ Prevention of deterioration arising out of soluble salts and freeze/thaw damage in reinforced concrete and porous block or brickwork.▪ To help prolonging the design or service life of buildings and civil engineering structures.
Advantages	<ul style="list-style-type: none">▪ 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	
Packaging	18,9 L (5 US gal.) pail (optional 600 mL (20 US fl. oz) Caustic Soda catalyst available upon demand) 200 L (52,9 US gal.) drum
Colour	Clear liquid
Yield	Walls and building envelopes: 2.5 m ² /L (100 ft ² /US gal.) Concrete decks: 4.4 m ² /L (180 ft ² /US gal.) Alberta Transportation Specification: Type 1a: 320 mL/m ² [equals to 3.12 m ² /L (127 ft ² /US gal.)] Type 1b: 224 mL/m ² [equals to 4.46 m ² /L (181 ft ² /US gal.)]
Shelf Life	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.
Application Temperature (ambient & substrate)	Minimum -10 °C (14 °F)
Drying Time	Our product 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	30 cps
VOC Content	333 g/L
Chemical Resistance	Consult Sticks and Stones
<i>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.</i>	



Mixing	<p>Our product is supplied ready for use and must not be diluted. Stir thoroughly to ensure the material is fully blended and of uniform consistency using a slow-speed (300 - 450 rpm) drill and <i>Jiffy</i>-style paddle.</p> <p>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 our product. The catalyst should be added and stirred thoroughly until fully blended. The blended material must be used within 24 hours following the catalyst addition.</p> <p>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.</p>
Application	<p>Vertical Surfaces: Apply our product 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.</p> <p>Horizontal Surfaces: Apply our product using a roller or low pressure spray (<i>Chapin Viton™</i> 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 and 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.</p>
Clean Up	<p>Uncured material can be removed using Epoxy Cleaner or mineral spirits. Cured product can only be removed mechanically. Wash soiled hands and skin thoroughly in hot soapy water or use Hand Cleaner towels.</p>
Limitations	<ul style="list-style-type: none"> ▪ Our product 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 Sticks & Stones Building Solutions 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 our product; care is required during application or protection against contact may be necessary. ▪ Surfaces treated with our product cannot be overcoated with either cement or lime-wash based paints. ▪ Our product 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	<p>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.</p> <p>KEEP OUT OF REACH OF CHILDREN FOR INDUSTRIAL USE ONLY</p>

The Information, and in particular, the recommendations relating to the application and end-use of products, are given in good faith based on our 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.