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## **BARACADE SILANE 100 C**



# HIGH-PERFORMANCE, REACTIVE SILANE WATER REPELLENT

#### **PACKAGING**

5 gal (18.9 L) pail Code: TL1927 05C 50 gal (189 L) drum Code: TL1927 55C (MTO)

#### APPROXIMATE COVERAGE

The coverage rate for BARACADE SILANE 100 C is 250-400 ft<sup>2</sup>/gal (6.14-9.82 m<sup>2</sup>/L) per coat.

Because of variations in surface density, this coverage rate is approximate, and is intended for estimating purposes only. Use test applications on actual surfaces to accurately determine coverage rates. Very porous surfaces may require two coats of BARACADE SILANE 100 C.

#### **CLEAN UP**

Clean tools and equipment with alcohol, mineral spirits or similar solvent immediately following use. Clean drips and over spray while still wet.

### **SHELF LIFE**

3 years in original, unopened package

## SPECIFICATIONS AND COMPLIANCES

- BARACADE SILANE 100 C meets the performance standards of NCHRP 244
- Alberta Transportation B388 Type 1b (at 326 mL/m²)
- Alberta Transportation B388 Type 1c (at 155 mL/m²)
- Federal specification SS-W-110C
- Canadian MTQ

## **DESCRIPTION**

BARACADE SILANE 100 C is a breathable, ready-to-use, colorless, non-yellowing, deep penetrating, reactive penetrating sealer for concrete and masonry. BARACADE SILANE 100 C is a 100% silane formulation that produces a hydrophobic treatment to reduce water absorption. BARACADE SILANE 100 C protects concrete, block, stone, and brick against the damaging effects of water intrusion, deicing chemicals, freeze-thaw exposure, water-borne alkalis and acids, and atmospheric staining. Due to the 100% silane composition, BARACADE SILANE 100 C exhibits low volatility and higher coverage rates than solvent based silane materials.

### PRODUCT CHARACTERISTICS

#### **FEATURES/BENEFITS**

- Reduces water absorption
- Protects concrete against the damaging effects of water intrusion and deicing chemicals
- Protects against air-borne contaminants, such as acid rain
- Will not etch glass
- Helps extend the life of structures, via reduction of water and chloride absorption

#### PRIMARY APPLICATIONS

- Bridge decks
- Parking decks
- Ramps
- Driveways and sidewalks
- Vertical concrete and masonry

### **TECHNICAL INFORMATION**

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

Material Properties		
Silane Content	100%	
VOC Content	331 g/L	
Flash Point (Minimum)	154 °F (67.8 °C)	
Density	7.6 lbs/gal (0.91 kg/L)	
Resistance to UV	Excellent	
Depth of Penetration (avg.)	0.30 in. (7.6 mm)	
Dry Time Foot and Wheel Traffic	2 to 4 hours	

Resistance to Chloride Ion Penetration AASHTO T259 & T260		
Specimen	Avg. Absorbed Chloride Ion Content (lb/yd³)	
Untreated Control @ 1/16"- 1/2" depth	8.5	
Sealed Specimen @ 1/16"- 1/2" depth	1.3	
Reduction in Absorbed Chloride @ 1/16"-1/2" depth	85.0%	
Untreated Control @ 1/2"- 1" depth	2.8	
Sealed Specimen @ 1/2"- 1" depth	0.1	
Reduction in Absorbed Chloride @ 1/2"-1" depth	97.2%	

## NCHRP Report 244, Series II Reduction in Water Absorption

93.0%

NCHRP Report 244, Series II Reduction in Chloride Ion Content

93.7.%

Water Penetration Reduction (CMU)	
ASTM E514	

91.4%

## Absorption Reduction ASTM C642

93.3%

## NCHRP Report 244, Series IV Accelerated Weathering (Southern Exposure)

No Change

NCHRP Report 244, Series IV Reduction in Chloride Ion Content (Southern Exposure)

95.0%

Federal Specification SS-W-110C		
Water Repellency	0.53% water absorption	
Weathering	0.60% water absorption	
Efflorescence Resistance	No visible efflorescence	

## NCHRP Report 244, Series IV Accelerated Weathering (Northern Exposure)

No Change

NCHRP Report 244, Series IV Reduction in Chloride Ion Content (Northern Exposure)

91.0%

Absorption Reduction ASTM C67	
93.0%	

## Water Vapor Transmission ASTM E96

96% (2% reduction vs. control)

### **DIRECTIONS FOR USE**

**Surface Preparation:** Cure new concrete a minimum of 7 days before application. The longer the concrete is allowed to cure, the better the sealer performance will be. Surface must be clean, dry, open capillary, structurally sound, free of curing or form release compounds and other contaminants that will prevent the proper penetration of product. Prior to application, joints and moving cracks must be properly sealed with an elastomeric joint sealant. Non-moving cracks and voids wider than 1/64 inch (0.4 mm) must be filled with a suitable patching material. Do not apply product to a wet surface. Surfaces must dry a minimum of 24 hours following rain or exposure to other sources of moisture. Install caulking before product application. Mask or protect adjacent surfaces, including grass, plants, shrubs, metal, and asphalt from overspray or drips.

**Application:** Use low pressure, non-atomizing, airless spray equipment with solvent resistant hose and gaskets. Garden type sprayers may be appropriate for smaller projects. Brushes and rollers on large projects may not achieve a uniform coverage rate. Apply BARACADE SILANE 100 C in a single application to the horizontal surface with enough material to saturate the surface. Remove excess material with a broom or squeegee. If a second coat is required it should be applied "wet on wet" before first coat dries.

Typical traffic-ready time for BARACADE SILANE 100 C is 4 hours after application at 75 °F (24 °C) and 50% relative humidity. Warmer temperatures and/or low humidity will shorten the dry time, and cooler temperatures and/or high humidity will extend the dry time.

### PRECAUTIONS/LIMITATIONS

- Store at temperatures below 90 °F (32 °C).
- BARACADE SILANE 100 C is a DOT combustible liquid. Avoid fire, open flame and sparks.
- Do not dilute
- Do not allow to puddle. All product should penetrate the substrate with no surface build-up.
- Do not apply to a frost filled surface or when the temperature is below 20 °F (-6 °C).
- Do not apply if rain is expected within 4 to 6 hours.
- Not intended for use on below grade applications or applications where hydrostatic pressures exist. May not be effective on certain types of limestone or marble. Use in a well ventilated area.
- A small (6' x 6') test area is strongly recommended prior to starting full application, in order to ensure desired performance results, aesthetics, and coverage rates. Allow 5 to 7 days for product to fully react before evaluating.
- In all cases, consult the Safety Data Sheet before use.

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