

# SilaneSeal 300



**SilaneSeal 300** is a clear, penetrating, breathable, and VOC-compliant surface treatment for use on concrete. Chemically engineered with isobutylalkoxy functional silanes, SilaneSeal 300 is rapid drying and offers superior performance on high quality mix designs typical of new bridge decks. SilaneSeal 300 acts by creating a deep hydrophobic layer in the concrete that prevents water and contaminants from entering the substrate and causing premature deterioration.

## ADVANTAGES

- ⊙ Excellent resistance to chloride ion ingress
- ⊙ 100% moisture vapor transmission
- ⊙ Mitigation of AAR & ASR deterioration
- ⊙ Deep penetration into substrate
- ⊙ No change in surface appearance
- ⊙ No change in surface friction after application
- ⊙ High resistance to alkali attack
- ⊙ Long service life
- ⊙ Excellent performance on wearing surfaces
- ⊙ Dry time 1 hour at 70°F (21°C)
- ⊙ Will not inhibit adhesion of paints and line striping
- ⊙ LEED credits for both new and existing construction projects

## PACKAGING

- ⊙ 5.00 gallon pail
- ⊙ 51.00 gallon drum
- ⊙ 255.00 gallon tote

## USES

- ⊙ For use on cast-in-place, precast, GFRC, and high-strength concrete
- ⊙ Protects the reinforcing steel from corrosion due to the effects of water, deicing salts, and other waterborne contaminants.
- ⊙ To alleviate the deterioration of concrete due to alkali-silica reactivity.
- ⊙ Bridge decks where fast drying is needed to minimize lane closures.
- ⊙ Heavy-traffic wearing surfaces
- ⊙ Areas that receive high salt concentrations (piers, coastal buildings), to provide a high-performance, long-lasting chloride screen.

## SilaneSeal 300 PHYSICAL DATA

<b>Color</b>	<b>Water White</b>
<b>Active Substance</b>	<b>100% Isobutylalkoxysilane</b>
<b>Solvent</b>	<b>None</b>
<b>Flash Point</b>	<b>145.4°F</b>
<b>Density</b>	<b>7.3 lbs./gal</b>
<b>VOC Content</b>	<b>385 g/l</b>

## TEST METHODS

## TEST RESULTS

<b>Alberta DOT Penetrating Sealer Type 1c (0.35 w/c ratio)</b> Water Repellency After Heavy Abrasion	88.4%
<b>NCHRP #244 Series II</b> Reduction in Water Absorption @ 250 ft <sup>2</sup> /gal	86%
<b>NCHRP #244 Series II</b> Reduction in Water Absorption @ 250 ft <sup>2</sup> /gal	87%
<b>NCHRP #244 series IV</b> Reduction in Chloride Ion @ 250 ft <sup>2</sup> /gal	99%
<b>Equivalent Thickness of Concrete Needed to Give Same Chloride Ion Protection as Treatments (150 days of salt exposure)</b>	
Methyl Siloxane iso-Octyl Siloxane iso-Octyl Silane/Siloxane	0.25 inch 1.2 inches 1.2 inches
<b>Water Absorption of Concrete (ASTM C-642)</b> 24 hours 48 Hours 50 Days	0.03% 0.04% 0.20%
<b>ASTM C 672 Deicer Scaling (ASTM C-672)</b> 100 Cycles (non-air-entrained concrete)	0 Rating
<b>90 Day Salt Pounding (AASHTO T259)</b> Non Abraded Spec.	1/2" to 1" 0.34 lbs/yd <sup>3</sup> Cl-
<b>Skid Resistance of Paved Surfaces (ASTM E 274)</b> Dry Wet	No change No change
<b>Water Absorption of Concrete (ASTM D-6489)</b> 48 hours	95% reduction