



SOLHYDSEAL AQUA 40

Water-Based Silane Sealer
for Concrete and Masonry

SOLHYDSEAL AQUA 40 est une solution de silane monomère à base d'eau 40 % réactive et pénétrante qui forme une couche hydrophobe à l'intérieur de la matrice, ainsi que sur la surface du béton ou de la maçonnerie. SOLHYDSEAL AQUA 40 est un matériau monocomposant, sans solvant, à basse teneur en C.O.V. et peut être appliqué sur tout matériau siliceux.

■ USES

With its ability to penetrate deep into the concrete or masonry matrix, SOLHYDSEAL AQUA 40 remains effective for many years. Its penetration protects structures from weathering, UV rays, abrasion, and corrosion of reinforcement bars. SOLHYDSEAL AQUA 40 significantly reduces chloride ion penetration while allowing concrete or masonry to breathe. This reduces structural corrosion considerably. SOLHYDSEAL AQUA 40 is highly effective in reducing efflorescence, freeze-thaw cycle damage, leaching, deterioration from acid rain, alkali-silica reaction effects, and mold.

TYPICAL USES:

- Parking decks
- Ramps
- Bridge decks

■ PRODUCT FEATURES

- Can be applied from 2°C to 43°C (35.6°F to 109.4°F)
- Excellent surface penetration
- Provides excellent waterproofing while allowing vapor transmission
- Prevents chloride ion penetration and protects reinforcement bars from corrosion
- Excellent abrasion resistance
- Ready for rain exposure 4 hours after application @ 25°C (77°F)
- Approved by the Quebec Ministry of Transport

■ SURFACE PREPARATION

All surfaces must be thoroughly cleaned before applying any sealer. A surface contaminated with dirt and oil will hinder proper sealer penetration. Acceptable surface preparation methods for concrete include sandblasting, high-pressure water jetting, chemical cleaning, or Blastrack. No preparation is needed for building envelopes (blocks, bricks, or precast concrete panels). Concrete must have matured for a minimum of 28 days. Any concrete repairs must be completed beforehand and allowed to mature.

■ CURING

Once applied, SOLHYDSEAL AQUA 40 dries quickly. However, the residual silane monomer reaction with the substrate requires a minimum of 4 to 12 hours at an ambient temperature of 25°C (77°F). Curing time is significantly longer at lower temperatures.

■ ESTIMATING / YIELD

On concrete surfaces, optimal coverage is achieved at a rate of 4.9 m² per liter (200 ft² per gallon). Building envelope coverage is also 4.9 m² per liter. Actual coverage may vary depending on substrate porosity. Testing is recommended. Available in 20-liter pails and 205-liter drums.

PHYSICAL PROPERTIES OF MATERIAL @ 25°C (77°F)

PHYSICAL PROPERTIES	
Solvent base	None (Water)
Active ingredients	40 %
Density	0.93
Viscosity	5 to 10 cps
Color/Finish	Translucent whitish/Clear
V.O.C.	260 g / litre
Flash point	94°C / 200°F



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■ PRODUCT APPLICATION

Concrete must be at least 28 days old; any patching or repair of concrete must be completed and allowed to mature for a minimum of 7 days. SOLHYDSEAL AQUA 40 should be applied using low-pressure equipment (15 to 25 psi) with a fan tip nozzle. Alternatively, an electric power roller with a 25 mm nap or a brush can be used.

Do NOT dilute or modify the product.

Do NOT apply to wet or damp surfaces. Mix or stir thoroughly in the original container just before application.

For vertical surfaces, use a flow coating method from bottom to top, overlapping each coat by approximately 100 to 150 mm (4 to 6 inches).

AASHTO T 259 Salt Ponding Resistance «90-Day Salt Ponding»

(@ 4.9 m²/l [200 ft²/gal] coverage rate)

Depth	Reduction in Salt Absorption	Results/Criteria Allowed
0 to 14 mm	92 %	0.11 kg/m ³ / 0.850 kg/m ³
14 to 25 mm	95 %	0.00 kg/m ³ / 0.425 kg/m ³
25 to 40 mm	85 %	No criteria

NCHRP #244 Water and Chloride Ion Absorption

(@ 4.9 m²/l [200 ft²/gal] coverage rate)

Series	% Reduction	Media
Series II	85 %	In water absorption
Series II	87 %	In chloride absorption
Series IV	98 %	In chloride absorption

ASTM C 642 «Concrete Water Absorption»

Temps	% d'absorption
24 hours	0.25 %
48 hours	0.48 %
50 days	1.20 %

ASTM C 672 «Concrete Scaling Resistance to Deicing Chemicals»

(Non-air-entrained concrete)

Cycles	Visual Efficiency Rating
100	0 - No Scaling

ASTM D 1653 «Water Vapor Permeability of Organic Coatings»

Grams	Breathability
64 g/ft ² / 24 hours	93 %

■ PRECAUTIONS / RESTRICTIONS

- SOLHYDSEAL AQUA 40 should not be applied at temperatures below 5°C (41°F), and ensure that the temperature does not drop below 5°C (41°F) for at least 12 hours after application.

■ CLEANING

Clean tools with water or allow the material to evaporate.

■ STORAGE

Store in a dry place at temperatures between 2°C (35°F) and 40°C (100°F). Shelf life in closed containers is a minimum of one (1) year. PROTECT FROM FREEZING.

■ SAFETY

Refer to the safety data sheet.

Always wear a respirator mask when working in confined spaces.

BMQ SOLUTIONS WARRANTS that the product conforms to its chemical description and is reasonably fit for the purpose stated on its Technical Data Sheet when used in accordance with its directions. BMQ Solutions makes NO OTHER WARRANTY either expressed or implied.

Buyer assumes all risk in handling.

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