

AQUAPEL™ AQUAPEL+PLUS™

Breathable, Micro-Emulsion, Silane/Siloxane Water Repellents for Horizontal Concrete Surfaces

MANUFACTURER
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PRODUCT DESCRIPTION

AQUAPEL is a new generation, 100% reactive, waterborne silane-siloxane sealer. This clear, penetrating, breathable water repellent is ideal for use on interior and exterior, above grade, traffic bearing concrete. AQUAPEL penetrates concrete surfaces and chemically bonds directly with the substrate which results in a surface that is highly resistant to the attacks of both moisture and salt.

AQUAPEL's unique, odorless, very low VOC formulation offers permanent, non-yellowing protection. AQUAPEL's accelerated chemical reaction with the natural minerals in the substrate produces a stable and predictable hydrophobic surface within seven days after application.

AQUAPEL is available in two concentrations. Regular AQUAPEL is ideal for normal duty, cast-in-place concrete with moderate exposure to salt and/or water. High solids AQUAPEL PLUS is for increased long-term protection on porous concrete, elevated structural traffic bearing concrete slabs, and on normal concrete with severe exposure to salt and water.

Basic Use: AQUAPEL offers positive salt screening in northern, southern and coastal climates. AQUAPEL's non-flammable, non-volatile formula minimizes corrosion of reinforcing steel and protects concrete from the damaging effects of deicer chemicals, road salts, and other chemicals. AQUAPEL's successful field and lab performance make it ideal for walkways, stairs, outside malls, building entrances, parking decks, garages, driveways, piers, bus and truck terminals, precast and prestress concrete. Other uses include architectural concrete, concrete and brick pavers, and exposed aggregate surfaces.

FEATURES & BENEFITS

- Formulated to stop moisture and salt penetration.
- Odorless/VOC compliant formulation.
- Ready-to-use, non-flammable, non-volatile, waterborne formulation.
- Environmentally safe.
- Invisible, non-darkening.
- No Film. Leaves surfaces breathable.

ESTIMATING

AQUAPEL is packaged in ready-to-use 1 gal. (3.8 liter), 5 gal. (18.9 liter) pails, and 55 gal. (208 liter) drums. Containers are identified with product name and batch code.

Coverage Rate:

Average rate is determined by surface porosity:

| | ft ² /gallon | m ² /L |
|--------------------|-------------------------|-------------------|
| Porous Surfaces | 125-150 | 2.5-3.5 |
| Broom Finish | 125-175 | 2.5-4.0 |
| Smooth Concrete | 150-200 | 3.5-5.0 |
| Densified Concrete | 200-300 | 5.0-7.5 |

TECHNICAL DATA

Applicable Standards:

NCHRP 244
ASTM E 514, ASTM C 672
VOC Compliant
California SCAQMD

Physical Properties:

AQUAPEL, AQUAPEL + PLUS

Color: Milky White Liquid, dries clear
Surface Gloss: None
Dry Time @ 70°F (20°C): 2-4 hours
ASTM C 672, Scaling Test
(0 rating="no scaling"): 0
Resistance to Ultraviolet Rays: Excellent
VOC Compliance (gms/Liter): <50

| | <u>AQUAPEL</u> | <u>AQUAPEL + PLUS</u> |
|------------------------------------------------------------------|----------------|-----------------------|
| NCHRP 244 Series II, Water | | |
| Absorption Reduction, % min | 84 | 85 |
| NCHRP 244 Series II, Chloride | | |
| Intrusion Reduction, % min | 84 | 90 |
| Depth of Penetration (mm) (Depending upon substrate porosity) | 2-6 | 2-6 |

INSTALLATION

Preparation: Concrete must be structurally sound and clean of all dirt, laitance, contaminants, oil, existing coatings or membrane curing compounds before application. Repair deteriorated area with **DURACRETE**. Caulking and sealant materials must cure adequately before applying **AQUAPEL**.

New Concrete: Allow concrete to cure 14 days or longer before applying **AQUAPEL**. Remove surface laitance and other contaminants.

Installation: Agitate or stir **AQUAPEL** before using to disperse active ingredients. **Do not dilute.** Apply **AQUAPEL** directly from sealed containers. For best results apply with low pressure sprayer with fan nozzle, roller or bristle broom. Apply in a single, uniform, saturating application. Broom out all puddles. On extremely porous substrates, two applications may be necessary. Apply the second application immediately as surface drying of first coat has become apparent.

Interior densified concrete application: One coat only. Apply with fine even spray or microfiber pad. As product is drying, approximately 30 minutes, apply light spray of clean water and lightly scrub any residue either off or into the concrete.

Clean Up: Clean up equipment and overspray immediately with soap and water. For dried residue, scrub with hot water and mild citric acid.

FOR BEST RESULTS:

In approximately seven (7) days after application, surfaces treated with **AQUAPEL** or **AQUAPEL PLUS** will develop full water repellent properties. **AQUAPEL** should not be applied if air, product, and/or surface temperature is below 40°F (4°C) or above 100°F (40°C). Do not apply if precipitation is expected within four hours, or if rain has preceded the application in the past 24 hours. **AQUAPEL** is not recommended for below grade waterproofing. Protect glass, shrubbery, and plant life from over spray. Not effective for some stone surfaces. Over application of **AQUAPEL** may cause a slight darkening of the surface and slipperiness. Do not apply in high winds. Do not dilute.

PRECAUTIONS

Keep from freezing. **AQUAPEL** can be made useless by freezing. Wear protective gloves and goggles. Avoid prolonged skin contact and absolutely no contact with all food stuffs. Please refer to the material safety data sheet (MSDS) for more detailed information.

STORAGE/SHELF LIFE

AQUAPEL containers are to be sealed and stored in a clean, dry area between 45-85°F (6-29°C). Keep from freezing. Shelf life is one year in unopened containers.

WEBSITE

L&M's convenient internet website offers instant access

to Tech Data Sheets, Material Safety Data Sheets, product updates, and other useful information. Visit www.lmcc.com and follow the easy steps. L&M is ready to respond to your concrete information needs - anytime - anywhere!

SHORT SPEC

071900: Water repellent treatment (Horizontal Concrete):

A) (Cast in place concrete with moderate exposure for salt and/or water.) VOC compliant, odorless, silane/siloxane blend. Surpasses NCHRP 244, Series II Test, reducing water and salt penetration by 84%. "**AQUAPEL**" by L&M Construction Chemicals, Inc. Five year warranty.

B) (Porous concrete surfaces or normal concrete with high or severe exposure to salt and/or water.) VOC compliant, odorless, silane/siloxane blend. Surpasses NCHRP 244, Series II Test, reducing water and salt penetration by 85%. "**AQUAPEL PLUS**" by L&M Construction Chemicals, Inc. Ten year warranty. L&M approved installer required.

LIMITED WARRANTY

Contact L&M for available five and ten year performance warranty, which requires the use of an approved L&M installer.

This product is warranted to be free of defects in material and workmanship, and conform to L&M Construction Chemicals ("L&M") quality control standards. All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind, expressed or implied including but not limited to, an implied warranty of merchantability or an implied warranty of fitness for a particular purpose. Satisfactory results depend upon many factors beyond L&M's control. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from his or her direct use, indirect use or consequential to their use of the product. L&M shall not be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use or inability to use the product. L&M's sole responsibility shall be to replace that portion of the product which proves to be defective. Any warranty claim must be made within six (6) months from the date of the claimed breach. This limited warranty applies only if the product was properly installed and used according to all instructions and was properly stored prior to use.

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January 6, 2012