

SIL-ACT® Product Data

ATS-42 L

Alkyltrialkoxysilane



ADVANCED
CHEMICAL
TECHNOLOGIES, Inc.

"Protecting the World's Infrastructure"

SPECIALLY FORMULATED

SIL-ACT® ATS-42 L is specially formulated to provide water repellency to calcareous stones such as limestone, marble, granite, natural stone and manufactured derivate substrates. In addition to water repellency it also acts as a surface consolidation agent; binding loose or powdery particulates by encapsulating the calcium carbonate to form a denser material. Substrates such as sandstone become harder due to the silicate bonding with its internal quartz components.

PERFORMANCE & DURABILITY

SIL-ACT® ATS-42 L is a clear, penetrating silane treatment which renders many calcareous stones repellent to water, chloride, ions and waterborne contaminants, preventing their premature deterioration.

SIL-ACT® ATS-42 L forms a chemical bond which will last until the penetrated depth is abraded away. While the surface of the substrate is water repellent, it remains permeable, allowing harmful water vapor in the substrate to escape. This is the difference between SIL-ACT® ATS-42 L and film forming water proofing products.

BENEFITS

- Renders calcareous substrates water repellent; preventing deteriorating effects such as spalling, scaling, efflorescence, subflorescence, leaching and staining.
- Renders natural and manufactured marble particularly resistant to staining from agents such as food, coffee, tea, wine and other liquid products (ideal for marble counter tops and flooring tiles).
- Eliminates loose and powdery surfaces; strengthens the substrate.
- Does not change the appearance, skid resistance or permeability of the substrate (however, a test patch is always recommended).
- Easy to apply – it can be applied to the substrate surface by low-pressure spray, brush, roller, or squeegee.
- Easy to store – it can be stored on the job site at extreme temperatures, unlike emulsified silane products which can deteriorate under such conditions

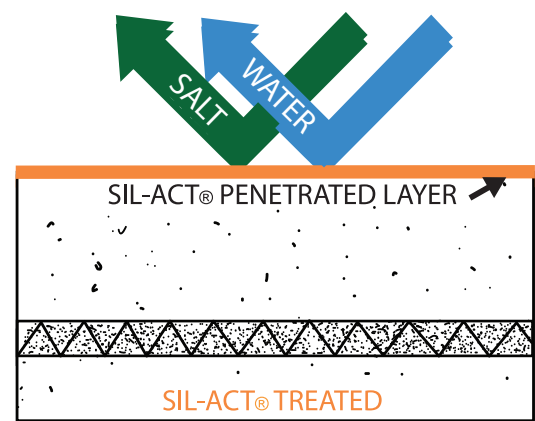
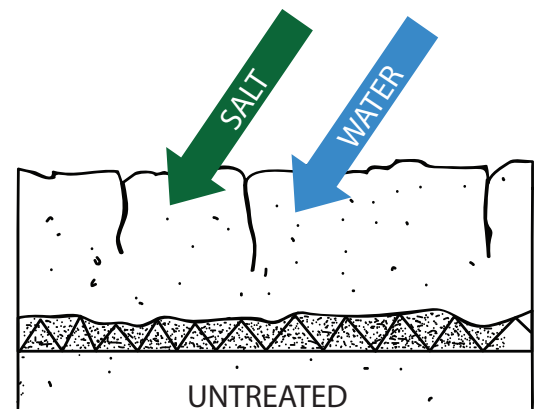
STOPS

WATER

CHLORIDE

WATERBORNE
CONTAMINANTS

PERFORMANCE TESTED!



SIL-ACT®'s penetrated silane treatment layer stops water and salt intrusion into concrete, brick, masonry and many types of stone without affecting natural vapor permeability.

TECHNICAL DATA

| PROPERTY | TEST | ATS-42 L |
|--------------------------------|--------------------------------|-----------------------------------|
| Active Ingredient | | Alkytrialkoxysilane ethylsilicate |
| Specific Gravity | Method 24, ASTM D-5095 | ~ 0.92 |
| Density | | 7.02 lb/gal |
| Active Content | | > 40% by weight |
| VOC Content | | < 600 g/L |
| Flash Point | | 53°F |
| Drying time at 70°F | | 1 hour |
| Moisture Absorption Reduction | ASTM C-642-82 | 0.30% 48 hours 1.80% 50 days |
| Moisture Vapor Permeability | OHD L-35 | 100% |
| Depth of Penetration | OHD L-34 / NCHRP 244 Series II | 0.20 in, 5.1 mm |
| Reduction in Water Weight Gain | NCHRP 244 Series II | 87.5% |
| Reduction in Absorbed Chloride | NCHRP 244 Series II | 90.0% |
| Moisture Vapor Permeability | NCHRP 244 Series II | 100% |

INSTRUCTIONS

1. Test a small area prior to general application to ensure compatibility, desired results and coverage rates.
2. Treatment is most effective when the surface to be treated is clean and dry. Remove dirt, dust, oil, grease, curing compounds, coatings, and other surface contaminants. Water blasting, sandblasting or shotblasting may be required.
3. Please refer to Advanced Chemical Technology's CleanACT™ line of concrete and masonry detergents and cleaners.
4. Do not proceed unless surface and air temperature is between 40°F and 110°F. Do not apply if frost, ice, or standing water are visible on the surface to be treated.
5. Protect windows, metals, etc. from overspray. If necessary, immediately clean overspray with a clean dry cloth, soap and water or alcohol. Protect plants and vegetation from overspray. Prior to SIL-ACT® ATS-42 L installation, check for preexisting contamination.
6. Spray, brush or roll SIL-ACT® ATS-42 L treatment on surface to be treated at the recommended application rate. Contact your SIL-ACT® representative for details.
7. Apply to saturation. Allow spraying dispersion at low pressure, if necessary follow with broom or squeegee for even distribution.
8. Normal coverage rate is approximately 75 to 125 square feet per gallon.
9. Clean equipment with alcohol or suitable solvent.
10. Partially used containers should be properly sealed and protected from contamination by water or other foreign substances.

WARRANTY

Limited warranties are available for all SIL-ACT® products. Contact ACT or your local SIL-ACT® representative for details.

SIL-ACT® ATS-42 L is covered by several patents including U.S. 4,931,319

NOTICE: This brochure was prepared as an introduction to a product manufactured by Advanced Chemical Technologies, Inc. The information provided herein is based upon typical installation conditions and is believed to be reliable. However, due to the wide variety of possible intervening factors, Advanced Chemical Technologies, Inc. does not warrant the expected results to be obtained. Details concerning product specifications and warranty may be obtained from Advanced Chemical Technologies, Inc. Specifications are subject to change. Sale of subject system is limited to Advanced Chemical Technologies, Inc. and authorized applicator's conditions of sale including those limiting warranties and remedies.

