

# SIL-ACT® Product Data

## ATS-42A

Low VOC

LEED Compliant

Alkyltrialkoxysilane



ADVANCED  
CHEMICAL  
TECHNOLOGIES, Inc.

“Protecting the World’s Infrastructure”

### HIGH PERFORMANCE

SIL-ACT® ATS-42A is a specially formulated Low VOC solvent based, clear, penetrating silane treatment, that is compliant with the OTC Model. SIL-ACT® ATS-42A when applied properly causes concrete, masonry and many natural stones to become repellent to water, chloride, waterborne contaminants and weathering elements, preventing premature deterioration of all types of concrete and masonry structures.

### DURABLE

SIL-ACT® ATS-42A is a clear, Low VOC, penetrating silane treatment which can be applied to the surface by low-pressure spray, brush, roller or squeegee. SIL-ACT® ATS-42A chemically bonds with the substrate forming a penetrated layer below the surface that acts as a one way filter. Water, chloride and other waterborne contaminants are repelled without restricting the substrates natural vapor permeability.

### FLEXIBLE

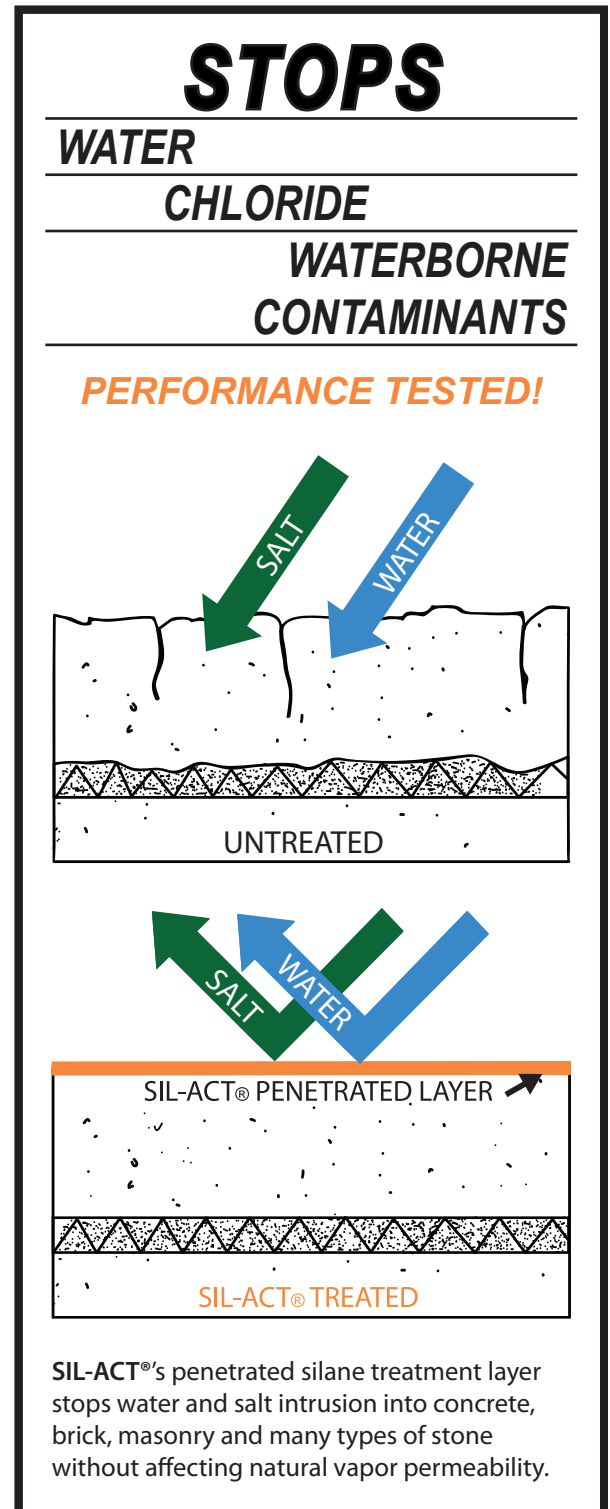
SIL-ACT® ATS-42A is formulated to be a high performance effective silane treatment for brick, masonry, concrete and many natural stones.

Structures that can be treated include:

- Parking Structures
- Stadiums
- Cooling Towers
- Airport pavements
- Bridges
- Highways
- Other Horizontal and Vertical structures
- No masking of windows required

#### Benefits

- Renders concrete and masonry substrates water repellent, preventing deteriorating effects, such as spalling, efflorescence, scaling, leaching and staining.
- Easy to store – it can be stored on the jobsite at extremely low temperatures. Avoid extreme heat.
- Does not change the appearance, skid resistance or permeability of the substrate (however, a test patch is always recommended).



# TECHNICAL DATA

PROPERTY	TEST	ATS-42A
Active Ingredient		Alkyltrialkoxysilane
Specific Gravity	Method 24, ASTM D-5095	0.834
Density		6.916 lb/gal
VOC		<250 g/L
Active Content		>40% by weight
Drying time at 70 °F		3-4 hours
Freeze-Thaw Scaling Resistance	ASTM C-672	0 at 100 cycles
Reduction in Absorbed Chloride	NCHRP 244 Series II	86.6%
Reduction in Absorbed Chloride	NCHRP 244 Series IV (Southern Exposure)	85.5%
Chloride Ion Penetration	AASHTO T 259/ T 260	0.012% @ 1/2-inch depth 0.010% @ 1-inch depth
Chloride Reduction	AASHTO T 259/ T 260	95.1% @ 1/2-inch depth 92.8% @ 1-inch depth
Moisture Absorption Reduction	ASTM C 642	80.4% reduction

## INSTRUCTIONS

- Test a small area prior to general application to ensure compatibility, desired results and coverage rates.
- 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.
- Please refer to Advanced Chemical Technologies CleanACT™ line of concrete and masonry detergents and cleaners.
- Do not proceed unless surface and air temperature is between 20°F and 110°F. Do not apply if frost, ice or standing water are visible on the surface to be treated. Dry times will be extended at lower temperatures.
- Window, metals, etc. are not affected by SIL-ACT® ATS-42A. No masking of windows required. However, if necessary clean overspray areas with SIL-ACT® Equipment Cleaner. Protect plants and vegetation from overspray. Prior to installation check for preexisting contamination.
- Spray, brush or roll SIL-ACT® ATS-42A treatment on surface to be treated at the recommended application rate. See equipment section of this catalog or contact Advanced Chemical Technologies, Inc. for spray equipment options.
- Apply to saturation. When spraying at low pressure, if necessary follow with broom or squeegee for even distribution.
- Normal coverage rate is approximately 125 to 250 square feet per gallon.
- Clean equipment with SIL-ACT® Equipment Cleaner.
- 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.

**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.

