



Aquanil Plus 40-A

Low VOC, Solvent Based,
Penetrating Silane Sealer
for Concrete and Masonry

SPECIALTY CONSTRUCTION PRODUCTS

P R O D U C T D A T A

DESCRIPTION

Aquanil Plus 40-A is a penetrating, chemically reactive alkyltrialkoxysilane 40% solids, solvent based silane sealer that repels moisture and water from concrete and masonry. **Aquanil Plus 40-A** is non-etching, will not harm most uncoated glass or metal frames and leaves no residue to clean. **Aquanil Plus 40-A** is formulated to comply with low Volatile Organic Compound (VOC) Emission Standards where emission standards are <250 g/L.

USES

- Horizontal or vertical, exterior or interior, cured concrete and masonry.
- Residential, commercial, industrial and municipal applications.
- All types of concrete flatwork, parking lots and structures, driveways, plazas, patios and walkways
- Median barriers, bridge decks and piers, ramps, pavements.
- Marine structures, vehicular repair and wash down facilities, loading docks.

ADVANTAGES

- No need to mask uncoated windows or metal frames, does not etch surfaces
- Leaves no residue, requires no cleaning after application
- Minimizes chloride ion penetration from deicing chemicals, acid precipitation, salt air, and water in marine environments that reduce corrosion of the reinforcing steel from chloride exposure
- Reduces spalling of new concrete surfaces due to freeze-thaw cycling
- Chemically reacts with concrete and masonry components for long lasting protection.
- Penetrates deeply for maximum protection
- Seals pores and capillaries of substrate preventing liquid absorption while allowing excellent vapor transmission
- Does not alter appearance or texture of substrates

Packaging / Part Number		
1 gal case	4 x 1 gal/case	F3316.04
5 gal/ 18.9L	36/pallet	F3316.05
55 gal/208L	4/pallet	F3316.55

TECHNICAL DATA

Complies with National VOC Emission Standards for Architectural Coatings Federal EPA Regulation 40 CFR Part 59 and lower VOC regulations @ < 250g/L.

Test Data	
ASTM E 514 Water Repellency Wind Driven Rain Conditions	100% reduction
ASTM C 672 Scaling Resistance	Passes
ASTM C 642 Absorption	95% red'n 24 hrs
ASTM E 96 Water Vapor Transmission	8% reduced rate vs control
ASTM G 53 Weathering 2,400 hours	< 5% loss of repellency
ASTM D 1653 Permeability	> 85% breathability vs control
Appearance	Clear
VOC Content	<250 g/L
Drying Time	2 to 4 hrs
Reaction Time @ 50% R.H. 70°F (21°C) 50°F (10°C)	24 hrs 48 hrs
Solids	35 to 45%
Flash Point	-4°F (-20°C)

NCHRP 244 Test Data @ 125 ft²/gal (3.0 m²/L)

	Control % reduction	Aquanil Plus 40 % reduction
Weight Gain	0	85
Chloride Ion Content		
Northern Exposure	0	88
Southern Exposure	0	97

DIRECTIONS

Surface Preparation: May be applied 14 days after concrete installation based on mix design, rate of cure and environmental conditions. Surface and ambient



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temperatures must be a minimum of 20°F (-7°C). Do not apply to frozen or frosted surfaces.

Surface must be clean and free from dirt, dust, laitance, oil, grease, paints, curing or sealing compounds, tilt up bond breakers and other contaminants that would prevent proper penetration. Extremely dense surfaces such as burnish trowel finished floors may be given a light acid wash to promote adequate penetration. Protect vegetation from overspray. If spills or overspray occur thoroughly rinse vegetation with water. **Repairs:** All cracks and deteriorated surfaces should be repaired prior to application of **Aquanil Plus 40-A**. Joints and channels should be taped or filled to prevent later adhesion problems. Consult ChemMasters technical service staff for product recommendations.

Estimating Guide

Actual rates may vary based upon substrate texture & porosity.
D.O.T. requirements take precedent on D.O.T. projects

Surface	ft ² / gal (m ² /L)
Brick, cement stucco, broom finish, exposed aggregate	100 to 150 (2.5 to 3.7)
Bridges/Parking Structures/ Precast Concrete	125 to 300 (3.1 to 7.4)
Vertical	175 to 350 (4.3 to 8.6)

Mixing: **Aquanil Plus 40-A** is packaged ready to use and does not require any special mixing.

Application: Apply continuously leaving no pinholes or gaps. Do not allow material to puddle.

Spray Apply with a low pressure, solvent resistant, airless sprayer equipped with a fan nozzle orifice of 0.025 to 0.030" at 0.5 gpm. The optimum spray pattern is an 8" to 12" fan. Hold sprayer tip 8" to 12" from the surface of the concrete. On vertical surfaces, begin application at the bottom working your way up while allowing a 6 to 12" run down. Excessive run down or over application can cause discoloration of the substrate.

Roller Apply: To smooth or horizontal surfaces using a short nap (1/4" max) solvent resistant roller.

On vertical surfaces, allow 6 inch minimum run down. Maximum run down is 12 inches. Excessive run down or over application can cause discoloration of the substrate.

Horizontal surfaces may be opened to traffic as soon as substrate is dry usually 1 hour at 72°F (22°C) with 50% R.H.

Cleanup: Clean tools and equipment used to apply **Aquanil Plus 40-A** with **Polyseal Solvent**, xylene or mineral spirits before material dries.

STORAGE

Store **Aquanil Plus 40-A** in tightly closed containers in cool dry area away from direct sunlight or sources of heat. Shelf life of properly stored material is two years from date of manufacture.

LIMITATIONS

- **Aquanil Plus 40-A** may remove special coatings from glass. Test small areas prior to application.
- **Aquanil Plus 40-A** will "frost" or damage plastic window panes and painted surfaces.
- Do not apply when surface or ambient temperature is below 20°F (-7°C) or above 100°F (38°C). Cooler temperatures will extend drying time.
- Do not apply to frozen, frosted, wet or damp surfaces or if rain is expected within 4 hours of application.
- If joints or channels are to be filled at a later date tape or mask prior to application to prevent adhesion problems.
- **Aquanil Plus 40-A** is a penetrating sealer designed to reduce the intrusion of water and salts. It is not a waterproofing membrane and thus cannot be expected to bridge cracks or joints in the concrete.
- **All label precautions and the SDS must be fully understood before using this product.** Ensure that you are using the most recent technical data sheet for instructions. Go to www.chemmasters.net for the most up to date information or contact ChemMasters at 800.486.7866 to verify.
- Proper application is the responsibility of the user. ChemMasters can only make technical recommendations and cannot provide quality control on the jobsite.

PRECAUTIONS:

For outdoor use only. Not for use indoors.

DANGER: Highly Flammable Liquid and Vapor. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. **Precautionary Statements:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands and skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

For professional use only. Keep out of reach of children. See the Safety Data Sheet for hazard information.

This Product is Formulated and Labeled for Industrial and Commercial Use Only

FOR BEST RESULTS AND SAFEST USAGE, USER IS SPECIFICALLY DIRECTED TO CONSULT THE CURRENT MATERIAL SAFETY DATA SHEET AND PACKAGE LABEL FOR THIS PRODUCT. We warrant our products to meet our published specifications and to be free from defects in materials and workmanship to the acceptable quality levels defined in these specifications. If acceptable quality levels are not specified, the acceptable quality levels will be those normally supplied by us for the product. We make no guarantee of the results to be obtained from the use of our products. The determination as to the adaptability of any of our products to the specific needs of the Buyer is solely Buyer's prerogative and responsibility. We are glad to offer suggestions on the use of our products. Nevertheless, there are no warranties given except such expresses warranties offered in connection with the sale of a particular product. Our liability shall be limited to replacement of, or refund of an amount not to exceed the purchase price attributed to, the goods as to which such claim is made. Our selection of one of these alternatives shall be Buyer's exclusive remedy. IN NO CASE SHALL WE BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, CO-CONDITIONS AND REPRESENTATIONS, EITHER EXPRESSED OR IMPLIED, WHETHER ARISING UNDER ANY STATUTE, COMMON LAW, USAGE OR TRADE, COURSE OF DEALING OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.