



ChemMasters®

Aquanil Plus 55

Penetrating Silane Sealer
for Concrete and Masonry

SPECIALTY CONSTRUCTION PRODUCTS

P R O D U C T D A T A

DESCRIPTION

Aquanil Plus 55 is a penetrating, chemically reactive alkyltrialkoxysilane 55% solids, solvent based silane sealer that repels moisture and water from concrete and masonry. **Aquanil Plus 55** is non-etching, will not harm most uncoated glass, metal frames, or painted surfaces and leaves no residue to clean. **Aquanil Plus 55** is formulated to exceed National Volatile Organic Compounds (VOC) Emission Standards for Architectural Coatings Federal EPA Regulation 40 CFR Part 59 < 600 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, metal frames, or painted surfaces – 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 reduces 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 the appearance or texture of substrates

TECHNICAL DATA

Exceeds National VOC Emission Standards for Architectural Coatings 40 CFR Part 59 < 600 g/L and meets the requirements of Lake Michigan Air Directors Consortium (LADCO) and Ozone Transport Commission (OTC) < 400 g/L.

NCHRP 244 Test Data

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

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 | <400 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 | 50 to 60% |
| Flash Point | 105°F (41°C) |

Packaging / Part Number

| | | |
|--------------|-----------|-----------|
| 5 gal/ 18.9L | 36/pallet | F.3335.05 |
| 55 gal/208L | 4/pallet | F.3335.55 |



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An American Owned & Operated Company

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Estimating Guide

| Surface | ft ² / gal (m ² /L) |
|-------------------|---|
| Brick | 150 to 200 (3.7 to 4.9) |
| Cement Stucco | 150 to 200 (3.7 to 4.9) |
| Concrete | 150 to 200 (3.7 to 4.9) |
| Exposed Aggregate | 150 to 200 (3.7 to 4.9) |
| Precast | 175 to 200 (4.3 to 4.9) |

DIRECTIONS

Surface Preparation: For best results substrate must be a minimum of 28 days old or fully cured. Surface and ambient temperatures must be a minimum of 40°F (4°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 55**. Joints and channels should be taped or filled to prevent later adhesion problems. Consult ChemMasters' Technical Service Staff for product recommendations.

Mixing: **Aquanil Plus 55** is packaged ready to use and does not require any special mixing.

Application: Apply **Aquanil Plus 55** with a low pressure, solvent resistant, airless sprayer generating 15 psi and equipped with a fan nozzle or use a roller. Follow recommended application rates listed above.

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 5 0% R.H.

Cleanup

Clean tools and equipment used to apply **Aquanil Plus 55** with **Polyseal solvent**, xylene or mineral spirits before material dries.

STORAGE

Store **Aquanil Plus 55** 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.

CAUTIONS

Combustible Liquid: Keep away from heat or open flame. Use with adequate ventilation. May cause skin, eye, and respiratory tract irritation. See Safety Data Sheet for details.

Keep out of the reach of children.

LIMITATIONS

- **Aquanil Plus 55** may remove special coatings from glass. Test small areas prior to application.
- **Aquanil Plus 55** will "frost" or damage plastic window panes.
- Do not apply when surface or ambient temperature is below 40°F (4°C) or above 100°F (38°C).
- Do not apply to 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 55** 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.

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.