



american coating technologies
www.amcoating.com

AM 21 Silane/Siloxane Penetrating Sealer

AVAILABLE IN 20% OR 40% STRENGTHS

Product Description

AM 21 is a one component water based multifunctional self-cross linking water soluble alkylalkoxy silane and siloxane designed to treat a wide variety of mineral substrates including architectural concrete, concrete block, split face block, pavers, stucco, porous and dense brick, clay tile, exposed aggregate concrete, sandstone, and slate.

Benefits of Use

- Provides excellent water repellency to reduce cracking, spalling, freeze-thaw damage, chemical degradation, biological growth, efflorescence, and dirt pickup, thereby lengthening substrate life and reducing maintenance costs.
- Provides excellent beading for improved aesthetics
- Low VOC emissions on curing. EPA compliant.
- Formulated to minimize darkening effects thus not changing substrates appearance
- (20% strength or less.)
- Good performance on both neutral and highly alkaline surfaces providing application field flexibility.
- Physically and chemically bonds to substrate
- Product is UV stable and will not discolor
- Product is resistant to biological degradation for longer service life.
- Coatings are vapor permeable to resist cracking, peeling, blistering and allows for carbonation to continue after the coatings application. This allows for lengthened substrate life and for greater substrate structural strength over time.

Volatile Organic Content:

Less than 280g/l, at 40% and 140g/l at 20% strength.

Colors Available:

White opaque emulsion

Coverage Per Gallon:

When the surface is fully saturated, coverage will depend on the absorptive of the substrate resulting in 100 to 400 square feet per gallon coverage.

Packaging Information:

This product is available in 1 gallon, 5 gallon and 55 gallon containers.

Shelf Life:

Six months in unopened containers when stored between 50-80 degrees F.

Finish Characteristics:

This product does not change the overall appearance of the substrate. After the material is applied and allowed to dry for 24 hours, it will not be readily apparent that the application has occurred, except the surface will exhibit excellent water repellency.

Dot Classification:

"Not regulated"

Viscosity:

Less than 25 cps

Abrasion Resistance:

The application of this product will increase the abrasion resistance of most substrates. Results will vary according to substrate type.

Adhesion:

Because this material becomes an integral part of the surface that is coated and does not form an impermeable barrier, delaminations do no occur.

Cure Schedule (70°):

Allow the material to dry for a 24 hour period of time to obtain the maximum benefits of the application

Application Temperature:

45-95 degrees F.

Primer/Topcoat:

2 coats recommended

PERFORMANCE OF AM 21: (both 20% & 40%)

| TYPE OF MATERIAL | % ABSORPTION |
|-----------------------------------------|-------------------|
| Water Repellency E514 | passes ASTM |
| Water Repellency | NCHRP 244 (86.75) |
| Water Repellency (after 1 month) | NCHRP 244 (81.88) |
| Water Repellency (after 5 freeze-thaws) | NCHRP 244 (80.5) |
| Unaltered Appearance (Delta E/5% soln.) | 1.08/1 |
| Reduction Of Cl (ion % effectiveness) | >80.0 |
| SCALING (*highest rating of 0) | ASTM C672 |

COVERAGE RATES & DILUTION:

| Recommendation: Substrate | Coverage Rates Sq.ft./gal. | Dilution Ratio (based on 40%) | |
|------------------------------|-------------------------------|----------------------------------|-------|
| | | % | Ratio |
| Architectural concrete | 80 | 6.6 | 5:1 |
| Concrete block | 80 | 6. | 5:1 |
| Split face block | 125 | 10.0 | 3:1 |
| Concrete pavers | 40 | 3.3 | 10:1 |
| Stucco | 125 | 10.0 | 3:1 |
| Porous brick | 150 | 10.0 | 3:1 |
| Dense brick | 350 | 20.0 | 1:1 |
| Clay tile | 75 | 6.6 | 5:1 |
| Exposed aggre. concrete | 325 | 20.0 | 1:1 |
| Sandstone | 125 | 10.0 | 3:1 |
| Slate | 450 | 40.0 | 0:1 |

Limitations:

See application procedures on the reverse side for more details. Always apply a test patch before using. Physical properties listed on this technical data sheet are typical values and not specifications. Highly concentrated solutions may remain slightly tacky, when dry. Always test at your dilution over the substrate to be applied to determine suitability before using. See reverse side for limitations of our liability.

WARNING: Keep out of the reach of children and read the MSDS and warranty and limitations to liability information before using.

AM 21 Instructions:

- 1) PRODUCT STORAGE:** Store product in an area so as to bring the material to normal room temperature before using. Continuous storage should be between 50 and 80 degree F. Keep from freezing.
- 2) SURFACE PREPARATION:** All dirt, oil, dust, foreign contaminants and sealers must be removed to assure a trouble free application. This product will work on a wide variety of substrates but a test patch should be placed prior to undertaking the application. The surface to be treated should be dry and should remain dry for a twenty four hour period after the application. Prepare surface by: abrasive blasting, acid etching, solvent degreasing, caustic soda scrubbing, or high pressure washing. If strong acidic or alkaline cleaning agents are used, neutralize the surface and remove all residues before application. Always apply a test patch to insure product suitability.
- 3) PRODUCT APPLICATION:** Stir material before using. Apply material without thinning when at a 20% concentration or dilute with water when using the 40% concentration according to the required concentration level necessary. Apply material with a brush, roller, or spraying equipment. Apply the treatment to the surface until it is saturated without puddles. Typical application rates will be about 125 square feet per gallon. Apply two coats using a wet-on-wet procedure to ensure complete coverage. Maximum water repellency is achieved in 72 hours depending on environmental conditions. Beading generally improves over time. Do not use for below grade applications or where water pressure is from interior walls. Do not apply to plastic or foam substrates. Penetrating sealer will not prevent water passage through unsound or cracked surfaces. Protect surrounding areas from overspray or splatter.
- 4) RECOAT OR TOPCOATING:** Two coats are recommended. Substrates that are coated with concentrations at 10% or less are generally recoat able and will actually improve the adhesion on mineral substrates.
- 5) CLEANUP:** Use any suitable detergent and water.
- 6) FLOOR CLEANING:** Caution! Although very unlikely, some cleaners may affect the color of the treated surface. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.
- 7) RESTRICTIONS:** Restrict the use of the substrate to light traffic and non-harsh chemicals including water until 24 hours has passed. Keep the area dry for this period (excluding the application of the product.)

NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY

We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommended herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications.

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