



ALLIED

AC 30 VOC SILOXANE SEALER

DESCRIPTION

Allied AC 30 VOC is an oligomeric alkoxy-siloxane which penetrates concrete or Portland cement based stucco or mortar and chemically bonds within the substrate by reacting with free silica and moisture either present in the substrate or in the atmosphere. The highly hydrophobic chemical molecules are extremely small resulting in penetration depths up to 5mm. AC 30 VOC as a penetrant is not film forming and will not significantly change the appearance or slip-resistance of the substrate. It may slightly darken the surface to which it is applied.

USES

AC 30 VOC has been primarily designed to seal concrete slabs, decks, walls, and abutments from both water and chloride intrusion while providing for water vapour transmission (breathability). AC 30 VOC will provide similar protection to cement-based masonry and stucco surfaces, inhibiting the penetration of most water-borne atmospheric pollutants.

PROPERTIES

Water Absorption (actual test results).

PERCENT WATER ABSORPTION			
MASONRY MATERIAL	EXPOSURE HOURS	CONTOL (UNTREATED)	TREATED WITH AC 30 VOC
Concrete Brick*	48	7.28	0.53
50mm Cement Mortar*			
Cubes per SS-W-11ob	72	8.0	0.48

*Immersed in AC 30 VOC for 5 seconds and then air dried for 24 hours, weighed and placed in a pan containing a constant level of ¼” water. After 48 hours in the pan of water, they were removed, wiped free of excess surface moisture, and reweighed.

APPLICATION

The substrate should be structurally sound and free of grease, oil, sealers, coatings, or other surface contaminants. Broom finish, swirl trowel finish or lightly brush blasted concrete surfaces lend themselves to penetration of AC 30 VOC. Tightly troweled concrete finished will not allow proper penetration of the sealer. New concrete should be wet cured for 28 days before application of AC 30 VOC. Do not use liquid applied curing compounds, concrete pores will become clogged preventing penetration of AC 30 VOC. (Consider using Allied Micro-Perf Concrete Curing Blankets). AC 30 VOC may be applied to slightly damp surfaces, providing no free water exists. Apply full flood coat evenly over the surface by roller or sprayer. Very hot and dry concrete may be fogged with water prior to sealer application to cool the surface. Allow any very wet areas to surface-dry before applying AC 30 VOC. After 10 minutes of penetration, pick up any puddled AC 30 VOC sealer remaining on the surface with a dry roller, rag, or mop to avoid non-uniform coloration. Apply to vertical surfaces in two coats on immediately after the other.

ADVANTAGES

- Markedly reduces water and chloride intrusion.
- Prevents staining and discoloration due to electro-static attraction of dust particles.
- Increases freeze that resistance.
- Inhibits efflorescence.
- Breathable system provides for water vapour transmission.
- UV Resistant – will not yellow.
- Can be applied to damp surfaces.
- Deep penetration into the substrate.
- Non-film forming. Does not alter surface texture or skid-resistance.

LIMITATIONS

Allied AC 30 VOC is designed to resist penetration of water-borne chlorides. Solvent and oil-based products will penetrate and stain concrete sealed with AC 30 VOC Solvent-carried acrylic and methacrylate topcoats may be applied over AC 30 VOC if resistance to oil staining is desired. AC 30 VOC cannot compensate for substandard concrete mix designs for finishing techniques. It can only enhance the performance of good concrete. Durable concrete will have a low water-cement ratio, adequate air entrainment and high strength. Consult your concrete produces for recommendations.

PRECAUTIONS

AC 30 VOC will slightly darken the surface appearance of the substrate to which it is applied. All control joints, cracks, and expansion joint sealings should be completed prior to application of AC 30 VOC. Do not apply in direct sunlight when temperature is over 32°C (90°F). Cooler temperatures will slow down the evaporation of VOC compliant solvents and improve penetration of AC 30 VOC. Do not apply when air or surface temperature is below 4°C (39°F).

HEALTH AND SAFETY

Avoid prolonged or repeated contact with skin. In case of skin contact, flush with plenty of water. For eye contact, immediately flush the eyes with plenty of clean water for at least fifteen (15) minutes and obtain medical attention. Avoid prolonged breathing of vapours or spray mists. If affected by inhalation of vapours, remove to fresh air. If swallowed, call a physician immediately. **DO NOT INDUCE VOMITING.** In case of fire, keep away from heat and open flames. Use only with adequate ventilation. For industrial uses only – keep away and out of reach of children. Review the Safety Data Sheet for complete information.

COVERAGE

Recommended coverage rates: 3.5 – 5.0 sq.m/L (175 – 245 sq.ft/gal)

VOC CONTENT 246 Gal/L (Compliant solvent)

PACKAGING

AC 30 VOC is supplied in 4 L cans, 17 L pails and 205 L drums.

NOTE: Seller's and manufacturer's only obligation shall be to replay such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damaged, direct or consequential, arising out of the use or the inability to use the product. Before using, the user shall determine the suitability of the product for his/her intended use, and user assumes all risk and liability whatsoever in connection therewith.