

WATER-BORNE ORGANO-SILANE SUBSTRATE CONDITIONER/ADDITIVE

With the introduction of W/O-STM Substrate Conditioner/Additive, ATG Labs is again at the forefront of water-borne solutions for the engineered cement, concrete and natural stone industries. Until now, all organo-silanes were solvent-borne... flammable, expensive to ship, and with very short pot life after mixing. For the first time, ATG Labs scientists have developed and perfected a totally water-borne organo-silane chemistry that is:

- non-flammable
- high-performance
- fast-drying
- with a very long pot life
- easy to use

THE NEW CHEMISTRY OF W/O-S

A true substrate conditioner, which can be used over the substrate or in a coating, is ambidextrous, namely with two active ends of the chemical structure. One end is an inorganic binder that typically locks to any compounds such as silica, sand, alumina, calcium, magnesium etc; and the other end must lock to organics such as residual coatings, resins in the fast-set cements, and (ultimately) the organic resins of the final topical coatings.

Until now, all such ambidextrous substrate conditioners required alcohol to "pop" the inorganic side. Since the active ends of these products are slowly neutralized by water, their pot life is short.

W/O-S has active end-terminals (already popped) that are sheltered by proprietary surfactant packages, allowing them to remain active for long periods of time in water.

SAFETY AND SAVINGS

Since alcohol is not used in ATG's new W/O-S chemistry, the expense of hazardous shipping is eliminated; and the water-borne, non-flammable product can be used safely on all job sites.

WHY A SUBSTRATE CONDITIONER/ADDITIVE?

The basic function of a substrate conditioner/additive is to increase the chemical bond between sealer and substrate. (Every airplane is treated with a solvent organo-silane before it is painted).

Any cementitious or natural stone substrate with an "unknown history" carries the risk of old silicones, oils and over-polished surfaces that can reject sealers and coatings. W/O-S, with the capacity to "chemically lock" such conditions and create a condition of high receptivity to sealers/coatings, is "low-cost insurance".

Additionally, all cementitious substrates, including engineered cements, experience a cure cycle that progresses with time. Un-hydrated materials and the complex variables of temperature and vapor pressures often create the possibility of later hazing under sealers. W/O-S is delivered to concretes/cements as a waterborne "second hydrating" element that can "coat and lock" the topical layer in a mode that becomes better cured and highly acceptable to sealers/coatings.

COVERAGES AND PACKAGING

W/O-S Substrate Conditioner is sold as a concentrate, packaged according to surface area that will be treated when diluted with water. Five SKU's are available: 60-75 sq.ft.; 250-300 sq.ft.; 500-600 sq.ft.; 1,100-1400 sq.ft.; and 2,200-2,800 sq.ft. (lower numbers are coverages for more absorbent substrates). As an Additive, W/O-S is sold premeasured for addition to unit sizes of A.T.G. primers and coatings.

APPLICATION

W/O-S Concentrate is added to (measured) water at the job-site and is ready immediately either for addition to an ATG coating or for application to a clean and dry substrate with ambient and surface temperature >60o and >85o. As a Substrate Conditioner, application is with short shag roller or sprayer to wet the substrate. Colorless and odorless, W/O-S dries in 30 minutes – 1 hour, ready for ATG coatings.