

VINNOL® 728

Versatile Interior, Exterior and Specialty Coatings' Binder for Low-VOC Paints

VINNOL® 728 is our multi-purpose binder with low-VOC capability and flame-retardant properties for a variety of interior and exterior high-performance paints.

VINNOL® 728 – High-Performance Exterior Paints and Primers

VINNOL® 728 is perfectly suited for exterior masonry paints and primers. It can be used as a sole binder or in blend systems. It exhibits superior efflorescence and alkaline hydrolysis resistance compared with vinyl acrylics, and similar or better efflorescence resistance compared with pure acrylics.

VINNOL® 728 – Your Perfect Choice for Specialty Applications

VINNOL® 728 is very versatile and thus can be widely used in specialty applications. The inclusion of vinyl chloride monomer increases the hydrophobicity of the polymer,

Properties of VINNOL® 728	
Solids [wt. %]	53 ± 2
T _g [°C]	0
MFFT [°C]	0
Particle size [µm]	0.17
Viscosity [cPs]	300 ± 200
pH	5.0 – 6.5
Density [g/cm³]	1.08

which makes it ideal for applications such as vapor barrier coatings. Vinyl chloride also has inherent fire retardancy which enables formulators to lower the levels of expensive specialty additives.

VINNOL® 728 can also be used for roof coatings either as a sole binder or in blend systems with pure acrylics, depending on the requirements. It has exceptionally high elongation capabilities (>1,000%) while still maintaining good tensile strength.

Recommendations for VINNOL® 728	
Gloss Levels	
Flat	● ●
Typical Applications	
Interior paints	●
Exterior paints	● ●
Roof coatings	● ●
Primers	●
Flame-retardant coatings	●
Vapor barrier coatings	●
End-User Suitability	
Do-it-yourself	● ●
Contractors	● ●

- ● Highly recommended
- Recommended

VINNOL® 728 – For Flat High-PVC Interior Paints

VINNOL® 728 enables the formulation of low-VOC paints as it requires little to no coalescing agents or organic solvents. Due to its low minimum film forming temperature (MFFT) of 0 °C, it is especially suited for interior flat coatings. Its excellent pigment binding makes it particularly suitable for higher PVC systems. Compared with standard vinyl acrylic-based systems, it provides a significant increase in wet scrub resistance.



Alkaline Hydrolysis Test



Commercial concrete & masonry primer

Fail control

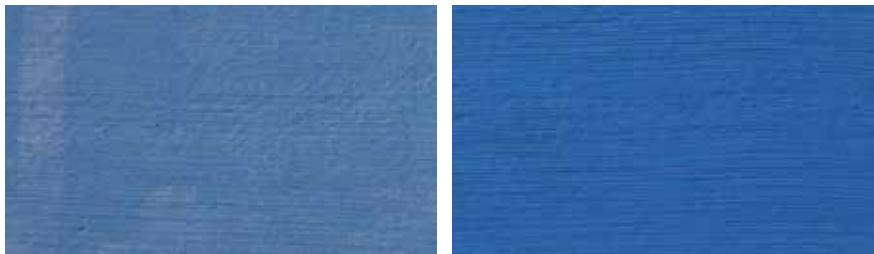
Primer formulation with VINNOL® 728

In this alkaline hydrolysis test, unglazed ceramic tiles are painted (all sides, excluding a strip at the bottom) and allowed to dry for 10 days in CTH conditions. They are then placed upright in a container containing a 2% NaOH solution with the unpainted bottom of the tile submerged. After 1 week they are removed and allowed to dry for an additional week before evaluation.

Superior Alkaline Hydrolysis Resistance

VINNOL® 728 shows excellent resistance to alkaline hydrolysis, as demonstrated by the homogeneous color and absence of defects (see right image of the figure on the left). It matches the performance of the acrylic commercial product (left). In the center, a polyvinyl, acrylic-based product, which shows clear signs of failure, is included for reference.

Efflorescence Test



Commercial concrete & masonry primer

Primer formulation with VINNOL® 728

In this efflorescence test, commercial mortar is applied to a HardiePlank® board and allowed to cure for 24 hours. The surface is then painted (color: phtalo blue) and allowed to dry overnight in CTH conditions before the panel is placed painted side down over a 50 °C water bath for 48 hours. Once removed, the panel is allowed to dry for 4 hours before evaluation.

Superior Efflorescence Resistance

The commercial product shows distinctive signs of efflorescence across the whole area, while the VINNOL® 728-based product retains integrity and color.

At a Glance: Properties of VINNOL® 728

- Multi-purpose product for both interior, exterior and specialty applications
- Allows formulation with little/no coalescent
- Excellent scrub resistance
- Very good touch-up properties
- Excellent pigment binding
- Tremendous elongation (> 1,000%)



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