

VINNAPAS® EP 3888

Binder for Low-Odor and Very Low-VOC Interior Paints with High Scrub Resistance, Designed for Broad PVC Range

VINNAPAS® EP 3888 is our state-of-the-art binder for flat and eggshell interior paints and plasters. It is ideally used above the critical pigment volume concentration (CPVC) and combines low-odor and very low-VOC capability with excellent performance and cost-in-use benefits.

VINNAPAS® EP 3888 – Your Gateway to Formulating Low-Odor and Very Low-VOC Interior Paints

VINNAPAS® EP 3888 enables the formulation of low-odor and very low-VOC paints (< 1 g/l), since it has a very low residual monomer content (< 200 ppm) and does not need organic solvents or coalescing agents to achieve optimum film formation. Its odor profile is noticeably subdued, especially compared to standard styrene-acrylic or vinyl-acrylic technology, resulting in quicker reuse of rooms after renovation.

Properties of VINNAPAS® EP 3888	
Solids [wt. %]	50 ± 1
Tg [°C]	10
MFFT [°C]	2
Particle size [µm]	0.3
Viscosity [mPa s]	700 +/- 500
pH	4–6

Furthermore, it is produced without the use of APEOs and features very low formaldehyde (< 20 ppm). The product is therefore especially suitable for places where low-emission paints are essential, e.g. in children's rooms, hotels and public buildings, such as hospitals and schools. VINNAPAS® EP 3888 is suitable for formulating paints that comply with major international ecolabels.

VINNAPAS® EP 3888 – Your Solution for Top-Performance Interior Paints

VINNAPAS® EP 3888 offers best-in-class performance in a variety of areas, such as scrub resistance and hiding power. Here, VINNAPAS® EP 3888 can outperform competing technologies, including traditional and low-Tg/MFFT styrene acrylics. Its very high scrub resistance means that the resulting paint film is easier to clean and wash without negative implications for the appearance of the paint. Furthermore, its good workability makes application easier. VINNAPAS® EP 3888 also allows the formulation of one-coat paints. This reduces the downtime of the facility and rooms can be quickly used again.

VINNAPAS® EP 3888 Offers Attractive Cost-in-Use Benefits

Its good thickener response allows formulators to improve cost-in-use performance and adjust workability. The binder's excellent scrub resistance not only increases performance at a given PVC level, but also allows increased PVC levels and reduced amounts of binder while maintaining a high performance level. The improved hiding power has two benefits compared with standard styrene acrylic systems: while it allows for lower TiO₂ content, resulting in lower formulation costs, it also facilitates application, making one-coat paints possible and reducing application cost. Furthermore, VINNAPAS® EP 3888 allows for the formulation of coalescent- and plasticizer-free paints, which saves the additional costs for those raw materials.

Recommendations for VINNAPAS® EP 3888

Gloss Levels

Flat	●●
Eggshell	●●
Satin	●

Typical Applications

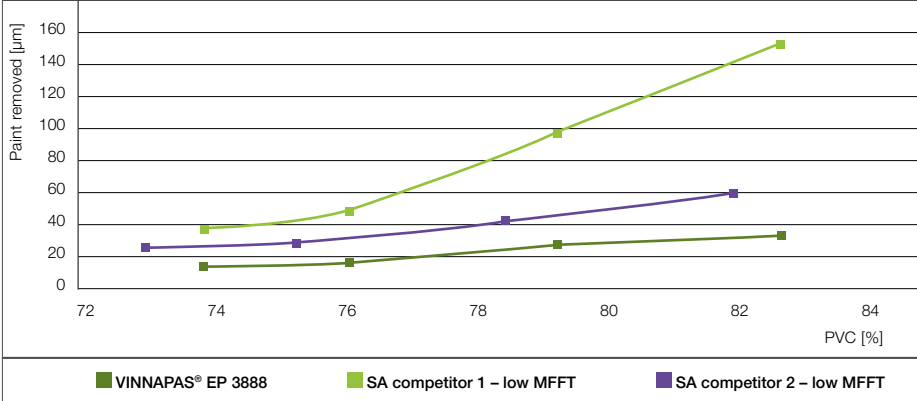
Interior wall paints	●●
Ceiling paints	●●
Interior plasters	●●
Interior primers	●
Glass-fiber, wall-covering paints	●

End-User Suitability

Do-it-yourself	●●
Contractors	●●

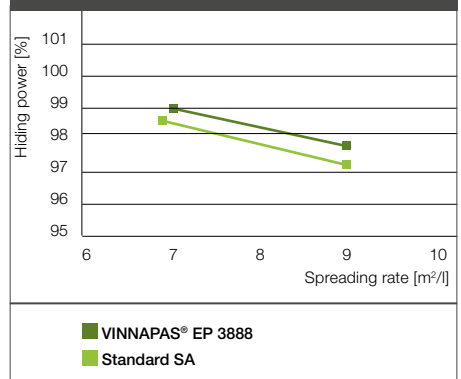
●● Highly recommended
● Recommended

Scrub Resistance Comparison Based on PVC Level as per EN ISO 11998



Comparison of scrub resistance between VINNAPAS® EP 3888 and two commercial standard, low MFFT-styrene acrylics (SA) as a function of PVC. VINNAPAS® EP 3888 exhibits much better scrub resistance starting from a PVC in the mid 70s all the way up to PVCs in the low 80s.

Hiding Power Comparison as per ISO 6504-3



VINNAPAS® EP 3888 shows better hiding power at given spreading rates than a competitive standard styrene acrylic (SA). This ability to improve hiding power while keeping the spreading rate high reduces the total cost per m².

Hiding Power Comparison of VINNAPAS® EP 3888 vs. Standard Styrene Acrylic (SA)



In terms of hiding power VINNAPAS® EP 3888 shows better performance than standard styrene acrylics at the same PVC level. Consequently, a reduction of the TiO₂ level is possible.

At a Glance:

Properties of VINNAPAS® EP 3888

- Suitable for flat to eggshell paints
- Suitable for various applications including wall paints, primers and plasters
- Suitable for both contractor and DIY applications
- Produced without the use of APEOs
- Very low residual VAM (< 200 ppm)
- Low-odor and very low-VOC (< 1 g/l) paints possible
- Allows formulation without coalescing solvents
- Very high scrub resistance
- Better hiding power than standard acrylic systems at the same PVC level
- Excellent response to thickening agents



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