

VINNAPAS® EF 8300



Polymer Dispersions

VINNAPAS® EF 8300 is an aqueous dispersion of a vinyl acetate-ethylene (VAE) copolymer. It was developed as a high performance polymer for interior architectural coating formulations with environmental advantages. This technology provides an alternative to a variety of technologies including vinyl acrylic/acrylic blends, vinyl acrylics with wet adhesion and pure acrylics.

Properties

High block resistance
High wet adhesion/water resistance
Excellent stain resistance
Maintains good scrub resistance
Very low residual VAM (< 200 ppm)
Allows formulation without coalescing solvents
Produced without the use of APEOs

Technical data

Specification

| Property | Condition | Value | Method |
|--------------------|-----------|-----------------|-----------------|
| Solids content | - | 54.0 - 56.0 % | specific method |
| Viscosity, dynamic | - | 100 - 500 mPa·s | specific method |
| рН | - | 4.0 - 5.0 | specific method |

General Characteristics

| Property | Condition | Value | Method |
|------------------------------|-----------|--------------------------------|-----------------|
| Density | - | approx. 1.07 g/cm ³ | specific method |
| Glass transition temperature | - | approx. 6 °C | specific method |
| Predominant particle size | - | approx. 170 - 240 nm | specific method |

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be downloaded via WACKER web site http://www.wacker.com.

Applications

Interior Paints & Coatings

Application details

As a broad application, high performance binder for architectural coatings, VINNAPAS® EF 8300 was designed to combine excellent performance properties (including good block resistance, scrub resistance, and wet adhesion) with the ability to formulate low VOC paints. With the ever-tightening restrictions on the permissible level of VOCs in coatings, it is becoming more important that the polymers used can be formulated at lower solvent levels without sacrificing performance. Many commercial binders used today, especially conventional vinyl acrylics and pure acrylics, suffer significantly in performance when formulated at lower solvent levels. VINNAPAS® EF 8300 requires little to no coalescing solvent, which allows formulators to develop high performance coatings even in low VOC paints. Therefore, it is in compliance with any major foreseeable requirements in the coatings industry.

Recommended applications include:

- Multiple interior applications, from wall paint to trim paint
- · Flat finishes through to high gloss paints; particularly recommended for satin and semi-gloss paints
- Suitable for both contractor and DIY applications

VINNAPAS® EF 8300 is positioned as an alternative to other technologies such as vinyl acrylics, acrylics, and blend systems in interior architectural applications. VINNAPAS® EF 8300 is also very compatible with other latex dispersions and can be blended with other polymers such as high Tg pure acrylics to provide excellent block resistance and wet adhesion–properties that are necessary in very high end coatings.

Processing

Specific formulating tips are available upon request and in the future will be available in the Formulation Guidelines bulletin on the WACKER web site.

Additional information

If the product is used in applications other than those mentioned, the choice, processing and use of the product is the sole responsibility of the purchaser. All legal and other regulations must be complied with.

For questions concerning food contact status according the chapter 21 CFR (US FDA) and German BfR, please feel free to contact us.

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Packaging and storage

Storage

When the dispersion is stored in tanks, proper storage conditions must be maintained. If stored in the original, unopened containers at cool (below 30 °C), but frost-free temperatures the product has a shelf life of 9 months from the date of manufacture. Any longer periods for the maximum storage period that may be described in the Certificate of Analysis which accompanies each shipment of the product, take preference over this suggestion in which case the time period stated in the Certificate of Analysis shall be solely authoritative. Iron or galvanized-iron equipment and containers are not recommended because the dispersion is slightly acidic. Corrosion may result in discoloration of the dispersion or its blends when further processed. Therefore, the use of containers and equipment made of ceramics, rubberized or enameled materials, appropriately finished stainless steel, or plastic (e.g. rigid PVC, polyethylene or polyester resin) is recommended. As polymer dispersions may tend to superficial film formation, skins or lumps may form during storage or transportation. Filtration is therefore recommended prior to utilization of the product.

Preservation for Transport, Storage and further Processing

The product is adequately preserved during transportation and storage if kept in the original, unopened containers. However, if it is transferred to storage tanks, the dispersion should be protected against microbial attack by adding a suitable preservative package. To maintain proper storage conditions appropriate measures should also be taken to ensure cleanliness of the tanks and pipes. In a storage tank in which the product is not stirred, it is advisable to contact your biocide representative/supplier. Proper procedures must be set up in order to prevent microbial attack between necessary periodic tank cleaning and sanitization. These procedures will vary, since loading and unloading practices in each storage situation will differ slightly. Finished products manufactured from polymer dispersions usually also require preservation. The type and scope of preservation will depend on the raw materials used and the anticipated sources of contamination. The compatibility with other components and the efficacy of the preservative should always be tested in the respective formulation. Preservative manufacturers will be able to advise you about the type and dosage of preservative required.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. These are available on request from WACKER sales offices or may be downloaded from the WACKER Web site www.wacker.com/vinnapas.

QR Code VINNAPAS® EF 8300



For technical, quality or product safety questions, please contact:

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