

# VINNAPAS® EF 3777



# **Polymer Dispersions**

VINNAPAS® EF 3777 is an aqueous polymer dispersion based on vinyl acetate and ethylene. The dispersion is produced without the use of alkyl phenol ethoxylate (APEO) containing compounds, organic solvents and plasticizers. Because VINNAPAS® EF 3777 has a low VOC content, it is suitable for the manufacture of low-emission products.

## **Properties**

- · Excellent pigment binding ability
- Very good scrub resistance
- Low blocking behavior in silk paint formulations

## Technical data

## **Specification**

Property	Condition	Value	Method
Solids content	-	55 - 57 %	DIN EN ISO 3251
Viscosity, dynamic	23 °C	150 - 1850 mPa·s	DIN EN ISO 2555
рН	-	3.5 - 5.5	DIN/ISO 976

#### General Characteristics

Property	Condition	Value	Method
Electrolyte stability	-	very good	specific method
Density	-	approx. 1.07 g/cm <sup>3</sup>	DIN EN ISO 2811-1
Minimum film forming temperature	-	approx. 1 °C	DIN ISO 2115
Frost resistance	-	Protect from freezing	specific method
Predominant particle size	-	approx. 200 nm	specific method
Protective colloid / emulsifier system	-	surface active emulsifiers	-
Filler compatibility	-	very good	specific method
Appearance of the dispersion film	-	clear, glossy	Visual
Surface of the dispersion film	-	tack free	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.

## **Applications**

• Interior Paints & Coatings

## **Application details**

VINNAPAS® EF 3777 is designed to provide outstanding performances in interior paints flat to semi-gloss. Due to its low MFFT and low levels of residual monomers VINNAPAS® EF 3777 is especially recommended as binder for environmentally friendly decorative coatings.

The pigment binding ability is excellent. Hence, even with low amounts of binder high level of abrasive resistance of a coating can be achieved. The use of VINNAPAS® EF 3777 enables the production of interior coatings with low odor and free of intentionally added organic solvents, which provide high performance without compromises regarding environmental compatibility.

#### 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. VINNAPAS® EF 3777 has a shelf life of 6 months starting from the date of receipt if stored in the original, unopened containers at temperatures between 5 and 30 °C. Any longer periods for the maximum storage period that may be described in the Certificate of Analysis which accompanies each shipment of VINNAPAS® EF 3777, 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

VINNAPAS® EF 3777 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.

Measures should also be taken to ensure cleanliness of the tanks and pipes. In unstirred tanks, a layer of preservative-containing water should be sprayed onto the surface of the dispersion to prevent the formation of unwanted skin and possible attack by microorganisms. The thickness of this water layer should be < 5 mm for low viscosity dispersions and up to 10–20 mm for high viscosity products. Proper procedures – periodic tank cleaning and sanitization – must be set up in order to prevent microbial attack. Contact your biocide representative/supplier for further plant hygiene recommendations. Measures should be taken to ensure that only clean air enters the tank when the dispersion is removed. 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 3777



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

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