

# VINNAPAS® eco EP 400 (XX MB)



## Polymer Dispersions

VINNAPAS® eco EP 400 (XX MB) is an aqueous, plasticizer-free polymer dispersion produced from the monomers vinyl acetate and ethylene.

VINNAPAS® eco is a fossil resources saving product, where a specific share of the fossil-based raw materials required for manufacturing of this product can be replaced by certified sustainable renewable feedstock. The substitution is based on the REDcert<sup>2</sup> mass balance approach, audited by an independent third party.

The exact amount of fossil raw material replaced depends on the selected product version and is specified in the corresponding certificate. Please contact your WACKER representative or visit the product page on the WACKER website [www.wacker.com](http://www.wacker.com) for additional information regarding WACKER's products or sustainability efforts, including mass balance.



## Properties

- Good adhesion to various plastic surfaces
- Permanently flexible adhesive joints
- High cohesion

## Technical data

### Specification

Property	Condition	Value	Method
Solids content	-	54 - 56 %	DIN EN ISO 3251
Viscosity, dynamic	23 °C	2000 - 2800 mPa·s	DIN EN ISO 2555
pH	-	4.0 - 5.0	DIN/ISO 976

## General Characteristics

Property	Condition	Value	Method
Density	23 °C	approx. 1.07 g/cm <sup>3</sup>	DIN EN ISO 2811-3
Minimum film forming temperature	-	approx. 0 °C	DIN ISO 2115
Frost resistance	-	protect from freezing	specific method
Protective colloid / emulsifier system	-	polyvinyl alcohol	-
Filler compatibility	-	very good	specific method
Appearance of the dispersion film	-	opaque	Visual
Surface of the dispersion film	-	slightly tacky	-
Glass transition temperature	-	approx. 5 °C	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.

## Application details

- Adhesives for paper packaging application
- PVC furniture foil adhesives

## Packaging and storage

### Packaging

VINNAPAS® eco EP 400 (XX MB) spart fossile Rohstoffe. Wann immer dieses Produkt gekauft wird, können bis zu 100 % der zur Herstellung notwendigen fossilen Rohstoffe durch nachhaltig zertifizierte Biomasse oder andere erneuerbare Ausgangsstoffe ersetzt werden. Die Substitution basiert auf dem REDcert2 Massenbilanz-Ansatz, der von TÜV Nord auditiert wird. Die exakte Menge der ersetzten fossilen Rohstoffe hängt von der Produktvariante ab und ist im REDcert2 Zertifikat spezifiziert, das Sie auf der Produktseite auf der WACKER Website finden.

### Storage

When the dispersion is stored in tanks, proper storage conditions must be maintained. VINNAPAS® eco EP 400 (XX MB) 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® eco EP 400 (XX MB), 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 resins) is recommended. As polymer dispersion may tend to superficial film formation, skins or lumps may form during storage or transportation. Filtration is therefore recommended to utilization prior of the product.

### Preservation for Transport, Storage and further Processing

VINNAPAS® eco EP 400 (XX MB) 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 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](http://www.wacker.com/vinnapas).

## QR Code VINNAPAS® eco EP 400 (XX MB)



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

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The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.