

VINNAPAS® EP 701K



Polymer Dispersions

VINNAPAS® EP 701K is a polymer dispersion based on vinyl acetate and ethylene. VINNAPAS® EP 701K has an excellent elongation, water resistance and flexibility.

Properties

- Excellent adhesion to various plastic surfaces
- Permanently flexible adhesive joints
- High adhesion

Technical data

Specification

Property	Condition	Value	Method
Solids content	-	54.0 - 56.0 %	specific method
Viscosity, dynamic	25 °C	2000 - 4000 mPa·s	specific method
pH	-	4.0 - 6.0	specific method

General Characteristics

Property	Condition	Value	Method
Density	25 °C	approx. 1.06 g/cm ³	specific method
Minimum film forming temperature	-	0 °C	specific method
Frost resistance	-	protect from freezing	-
Predominant particle size	-	approx. 1000 nm	specific method
Protective colloid / emulsifier system	-	polyvinyl alcohol	-
Filler compatibility	-	excellent	specific method
Appearance of the dispersion film	-	clear, glossy	Visual
Surface of the dispersion film	-	tacky	specific method
Glass transition temperature	-	approx. -10 °C	specific method
Appearance	-	milky, white	visual check

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

- Film-to-Wood lamination
- Flooring Installation
- Paper Packaging & Converting

Application details

Properties

VINNAPAS® EP 701K accepts high loadings of dry fillers and wets them well. It is compatible with both fully and partially hydrolyzed polyvinyl alcohols and will show no separation when formulated with any polyvinyl alcohol type. The water resistance of VINNAPAS® EP 701K can be improved by the addition of fully hydrolyzed polyvinyl alcohol. It is also compatible with an assortment of resins, solvents, plasticizers and other modifiers. This grade is designed as a plaster/plastic bonding agent and it can be used without plasticizer or solvent and additives to difficult bonding substrates.

Application

The low T_g and excellent adhesion to plastic substrates make VINNAPAS® EP 701K especially useful in bonding PVC film to particle board, where the low water content reduces swelling of the wood due to protection by polyvinyl alcohol. The excellent adhesion to difficult-to-bond surfaces shown by the dispersion is very useful in laminating films such as polyester, poly (ethylene terephthalate), poly (vinylidene chloride) and polystyrene to coated or uncoated papers. It shows good adhesion to metalized films and tempered aluminum foil. The rapid setting speed of VINNAPAS® EP 701K makes it very useful in high-speed packaging applications. The high-solids content is also important in bookbinding. The clear film and excellent adhesion of the dispersion are important in film overlay laminating. Typical application fields of VINNAPAS® EP 701K are as follows:

- Packaging (window cartons and carton forming)
- Envelop and Bookbinding
- Textiles and Upholstery
- PVC lamination and OPP wet lamination
- Packaging for difficult-to-bond substrates.
- Blending at vinyl acetate latex to reduce T_g without plasticizer migration
- Can be used for non-solvent application
- Paper coating

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 to chapter 21 CFR (US FDA) and German BfR, please feel free to contact us.

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Packaging and storage

Packaging

- 200 Kg Steel drum
- 220 Kg Steel drum
- 1 MT IBC
- 1.1 MT IBC
- 1 MT Returnable tote
- Flexi bag.
- Tank lorry

Storage

When the dispersion is stored in tanks, proper storage conditions must be maintained. The product has a shelf life of 9 months starting from the date of manufacture 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 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. 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. If the product is stored for a longer period, stirring is recommended before use.

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® EP 701K



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

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