# VINNAPAS® EP 701K (NJG)

VINNAPAS®

# **Polymer Dispersions**

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

### Properties

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

# **Technical data**

#### Specification

Property	Condition	Value	Method
Solids content	-	54.0 - 56.0 %	DIN EN ISO 3251
Viscosity, dynamic	25 °C	2000 - 4000 mPa·s	DIN EN ISO 2555
На	-	4.0 - 6.0	DIN/ISO 976
Residual monomer(vinyl acetate)	-	< 100 ppm	GC
Formaldehyde Level	-	< 15 ppm	specific method

#### **General Characteristics**

Property	Condition	Value	Method
Minimum film forming temperature	-	O° 0	DIN ISO 2115
Surface of the dispersion film	-	high dry tack	specific method
Glass transition temperature	-	approx10 °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.

# Applications

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

# **Application details**

#### Properties

VINNAPAS® EP 701K (NJG) is a chemically stable at both high and low pH. It is compatible with an assortment of resins, solvents plasticizer and other modifiers as well as the other VINNAPAS<sup>®</sup> EP dispersions.

#### Application

VINNAPAS® EP 701K (NJG) is especially suitable for the application of low formaldehyde, low free VAM residue and extremely low benzene and its homologues contents.

The low Tg and excellent adhesion to plastic substrates make VINNAPAS® EP 701K (NJG) especially useful in bonding PVC film to particle board, where the low water content reduces swelling of the wood due to its 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. The rapid setting speed of VINNAPAS® EP 701K (NJG) 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 (NJG) 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 Tg 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 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. 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. Please refer to "Best use before date" on the packaging label. Storage beyond the date specified does not mean that the product can't be used anymore, but the user should perform a quality check on the properties necessary for the intended application. 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 preservativecontaining 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® EP 701K (NJG)



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

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