

VINNAPAS® EN 421



Polymer Dispersions

VINNAPAS® EN 421 is an aqueous, self-crosslinking copolymer dispersion of vinyl acetate and ethylene, produced without the use of Alkyl Phenol Ethoxylate (APEO) based materials. It is particularly suited for the formulation of heat-curing or self-curing adhesives.

Properties

VINNAPAS® EN 421 has the softness and flexibility typical of a vinyl acetate-ethylene copolymer adhesive base. The self-crosslinking nature of the dispersion provides excellent wet strength and good solvent resistance. VINNAPAS® EN 421 resists discoloration on aging and leaves no residual odor in the finished product.

Technical data

Specification

Property	Condition	Value	Method
Solids content	-	51.5 - 52.5 %	specific method
Viscosity, dynamic	25 °C	300 - 800 mPa·s	specific method
pH	-	5.3 - 6.3	specific method

General Characteristics

Property	Condition	Value	Method
Density	-	1.06 g/cm ³	specific method
Frost resistance	-	protect from freezing	specific method
Protective colloid / emulsifier system	-	anionic surfactants	-
Glass transition temperature	-	approx. 0 °C	specific method
Appearance	-	white fluid dispersion	Visual
Dry tack	-	slightly tacky	specific method
Film clarity	-	clear	specific method
Flexibility	-	good	specific method
Mechanical stability	-	excellent	specific method
Water resistance	-	very good	specific method
Wet tack	-	moderate	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.

Protect against frost.

Applications

- Paper Packaging & Converting

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 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® EN 421



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

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