

# VINNAPAS<sup>®</sup> EN 1165



## Polymer Dispersions

VINNAPAS<sup>®</sup> EN 1165 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 as a moderately soft binder for nonwoven applications requiring superior wet tensile strength performance.

## Properties

VINNAPAS<sup>®</sup> EN 1165 may be used as a binder in nonwoven applications where soft hand and wet tensile properties are required. The dispersion is stabilized with an APEO-free surfactant system and offers good solvent resistance.

## Technical data

### Specification

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

## General Characteristics

Property	Condition	Value	Method
Glass transition temperature	-	approx. 0 °C	DSC, specific method
Density	-	1.06 g/cm <sup>3</sup>	specific method
Appearance	-	white fluid dispersion	Visual
Mechanical stability	-	excellent	specific method
Particle charge	-	anionic	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

- Wipes

## Application details

### Processing

Formulating recommendations include the addition of catalyst and a wetting surfactant. Catalysts should be added to the dispersion as a 10% solution under good agitation. Typical catalysts include ammonium chloride or sodium bisulfate. A 1% catalyst level (solids on solids dispersion) is sufficient to achieve complete crosslinking of the polymer. Surfactants can also be added to VINNAPAS® EN 1165 to improve penetration of the binder into the substrate and improve absorbency of the finished product. Effective surfactant levels are 0.5 to 1.0% on dispersion solids.

### Application

VINNAPAS® EN 1165 can be applied by a number of different application methods including saturation, spraying, foaming and print bonding. VINNAPAS® EN 1165 performs well on various fiber types including cellulose, rayon, glass, and polyester based substrates. This dispersion is especially suited for use in absorbent products and pre-moistened wipes.

### 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 VINNAPAS® EN 1165 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 VINNAPAS® EN 1165 has a shelf life of 9 months from the date of manufacture. 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® EN 1165 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 VINNAPAS® EN 1165 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 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® EN 1165



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

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