

# VINNAPAS<sup>®</sup> 192 (CTY)



## Polymer Dispersions

VINNAPAS<sup>®</sup> 192 (CTY) is a self-crosslinking, aqueous polymer dispersion produced from the monomers vinyl acetate and ethylene for the Nonwovens market. The dispersion is produced without the use of plasticizers.

## Properties

- VINNAPAS<sup>®</sup> 192 (CTY) offers a unique balance of high dry and wet strength, excellent absorbent properties, and imparts good handfeel.
- The dispersion has a low formaldehyde content of less than 100 ppm.
- Especially suited for use in feminine hygiene and related absorbent hygiene applications, as well as pre-moistened wipes.

## Technical data

### Specification

Property	Condition	Value	Method
Solids content	-	51.0 - 53.0 %	specific method
Viscosity, dynamic	25 °C	50 - 400 mPa·s	specific method
pH	-	4.5 - 6.0	specific method

## General Characteristics

Property	Condition	Value	Method
Density	23 °C	approx. 1.07 g/cm <sup>3</sup>	specific method
Frost resistance	-	protect from freezing	specific method
Appearance of the dispersion film	-	clear, glossy	Visual
Glass transition temperature	-	approx. 10 °C	DSC, specific method
Appearance	-	white fluid dispersion	Visual
Formaldehyde in dispersion	-	< 100 ppm	specific method
Predominant particle size	-	approx. 0.1 - 0.3 µm	specific method
Protective surfactant system	-	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

- Absorbent Hygiene Products
- Tabletop Nonwovens
- Wet Wipes

## Application details

### General

VINNAPAS® 192 (CTY) can be applied by a number of different application methods including saturation, spraying, foaming and print bonding. VINNAPAS® 192 (CTY) performs well on various fiber types including cellulose, rayon, glass and polyester based substrates. Drying temperatures above 150°C are necessary to achieve proper crosslinking.

### Processing

Formulating VINNAPAS® 192 (CTY) for a specific end use application may be necessary. Recommendations include the addition of an acid catalyst and a wetting surfactant. A catalyst should be added to the dispersion as a 10% solution under good agitation. Typical catalysts include ammonium chloride, sodium bisulfate and citric acid. A 1% catalyst level (solids on solids dispersion) is sufficient to achieve complete crosslinking of the polymer. Wetting surfactants can also be added to VINNAPAS® 192 (CTY) to improve penetration of the binder into the substrate and enhance absorbency of the finished product. Effective surfactant levels are 0.5 to 1.0% on dispersion solids. The compatibility and efficacy of the additives with VINNAPAS® 192 (CTY) should be storage tested if the formulated product is held for an extended period of time.

## 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. 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 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® 192 (CTY)



### 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.