

# VINNAPAS® CA 5310



## Polymer Dispersions

VINNAPAS® CA 5310 is an aqueous polymer dispersion based on vinyl acetate and ethylene. It is particularly suited in carpet binder applications where a softer hand is required. The dispersion has moderately high solids content that also permits the addition of moderate filler loadings. This results in adhesive formulations with the high solid contents that are typically required in the carpet industry. VINNAPAS® CA 5310 is not produced with any added organic solvents, plasticizers or formaldehyde donors.

## Properties

- VINNAPAS® CA 5310 may be used in applications where moderate filler loadings of calcium carbonate, aluminum trihydrate (ATH) or other fillers are required.
- The stabilization allows the dispersion to be compatible with acrylic dispersions and many styrene-butadiene lattices.

## Technical data

### Specification

Property	Condition	Value	Method
Solids content	-	> 54.5 %	DIN EN ISO 3251
Viscosity, dynamic	25 °C	4200 - 5600 mPa·s	DIN EN ISO 2555
pH	-	4.0 - 6.0	DIN/ISO 976

## General Characteristics

Property	Condition	Value	Method
Density	20 °C	approx. 1.07 g/cm <sup>3</sup>	ISO 2811
Frost resistance	-	protect from freezing	-
Filler compatibility	-	very good	specific method
Glass transition temperature	-	± 2 0 °C	specific method
Predominant particle size	-	approx. 1.0 µm	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

- Tufted Carpet Tiles

## Application details

### General

VINNAPAS® CA 5310 can be used in the production of woven carpets and in the production of tufted carpet tiles where a softer hand feel is required. VINNAPAS® CA 5310 offers high adhesion strength, and good flexibility.

### Special

VINNAPAS® CA 5310 can be applied by a number of different application methods including foaming (direct coating), pan coating and saturation.

VINNAPAS® CA 5310 performs well on various fiber types including polypropylene, polyamide, cellulose, and polyester.

## Processing

Foaming additives and dispersing agents can be added to VINNAPAS® CA 5310 to improve foamability and filler acceptance. We recommend alkali-swellable poly(acrylic acid) derivatives as thickening agents. Products with neutral pH, e. g., those based on cellulose derivatives, poly(vinyl alcohol) or polyurethane, can also be considered.

The compatibility and efficacy should be checked by conducting a storage test.

## 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.

Wacker Chemie AG Hanns-Seidel-Platz 4 D-81737 München Germany

## 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 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.

## 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® CA 5310



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

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