

VINNAPAS[®] 543 ED



Polymer Dispersions

VINNAPAS[®] 543 ED is a versatile polymer dispersion based on vinyl acetate and ethylene with excellent compatibility towards cement, pigments and fillers.

Properties

- VINNAPAS[®] 543 ED is a dispersion based on vinyl acetate and ethylene.
- VINNAPAS[®] 543 ED is produced without adding APEO, plasticizers or organic solvents.

Technical data

Specification

Property	Condition	Value	Method
Viscosity, dynamic	25 °C	1500 - 2500 mPa·s	DIN EN ISO 2555
pH	-	3.0 - 5.0	DIN/ISO 976
Solids content	-	53.5 - 55.5 %	DIN EN ISO 3251

General Characteristics

Property	Condition	Value	Method
Density	20 °C	approx. 1.07 g/cm ³	ISO 2811
Minimum film forming temperature	-	0 °C	DIN ISO 2115
Predominant particle size	-	approx. 0.5 - 1.0 µm	specific method
Protective colloid / emulsifier system	-	polyvinyl alcohol	specific method
Appearance of the dispersion film	-	Clear, glossy	Visual
Glass transition temperature	-	-2 - 2 °C	specific method
Compatibility with cement	-	very good	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

- Cementitious Tile Adhesives
- External Thermal Insulation Composite Systems (ETICS/EIFS)
- Skim Coat
- Waterproofing Membranes

Application details

VINNAPAS® 543 ED offers several advantages in a wide range of building chemical and construction applications. It exhibits a high compatibility towards cement and its influence on cement setting is marginal. The product shows an excellent compatibility with inorganic fillers like as CaCO₃ and imparts high bond strengths. VINNAPAS® 543 ED is compatible with other dispersions (such as styrene/acrylic and pure acrylic dispersions) and especially suitable for use in applications such as waterproofing membranes (WPM), tile adhesives, external thermal insulation composite systems (ETICS/EIFS), primer and bonding agents as well as cement admixtures.

For typical application fields of VINNAPAS® 543 ED you can refer to the section "application". Please discuss additional applications with your WACKER customer representative.

Processing

VINNAPAS® 543 ED can be blended with most anionic and/or nonionic aqueous polymer dispersions. However, the compatibility of the mixture should be tested by means of storage tests.

VINNAPAS® 543 ED has a minimum film forming temperature of 0°C. Therefore, there is no need to add any film-forming or coalescing agents to the formulation.

VINNAPAS® 543 ED is compatible with common pigments and extenders and is easy to process.

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. VINNAPAS® 543 ED has shelf life of 9 months if stored in the original, unopened containers at temperatures between 5 and 30 °C. Any longer periods for the maximum storage period that may be described in the Certificate of Analysis which accompanies each shipment of VINNAPAS® 543 ED, take preference over this suggestion in which case the time period stated in the Certificate of Analysis shall be solely authoritative. 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. 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 resins) is recommended. As polymer dispersion may tend to superficial film formation, skins or lumps may form during storage or transportation. Filtration is therefore recommended to utilization prior of the product.

Preservation for Transport, Storage and further Processing

VINNAPAS® 543 ED 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 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® 543 ED



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

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, Germany
info@wacker.com, www.wacker.com

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.