

VINNAPAS[®] 822 HD

Polymer Dispersions

VINNAPAS[®] 822 HD is a dispersion with excellent hydrophobic properties combined with very low flammability.

Properties

- VINNAPAS[®] 822 HD is a dispersion of a vinyl chloride, ethylene and vinyl ester terpolymer.
- VINNAPAS[®] 822 HD can be used as a binder for coating systems containing an opacifying pigment, such as polymer-modified plasters.
- The special composition and manufacturing technology mean that VINNAPAS[®] 822 HD can be used to formulate very hydrophobic products.

Technical data

Specification

Property	Condition	Value	Method
Viscosity, dynamic	23 °C Brookfield, spindle 4 / 20 rpm	3000 - 8000 mPa·s	DIN EN ISO 2555
pH	-	7 - 9	DIN/ISO 976
Solids content	-	59 - 61 wt. %	DIN EN ISO 3251

General Characteristics

Property	Condition	Value	Method
Minimum film forming temperature	-	approx. 7 °C	DIN ISO 2115
Protective colloid / emulsifier system	-	anionic surfactants	-
Appearance of the dispersion film	-	clear, glossy	Visual
Glass transition temperature	-	approx. 14 °C	specific method
Compatibility with cement	-	very good	specific method
Film-forming aids, solvents, plasticizers	-	1,6 wt. Fatty acid ester based on dispersion %	specific method
Predominant particle size	-	approx. 300 nm	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.

Application details

VINNAPAS® 822 HD has only a slight intrinsic odor. It forms a film that is characterized by very low water uptake and good saponification resistance. To achieve optimum weatherability in pasty plasters and facade coatings, only use opacifying pigments in adequate quantities.

VINNAPAS® 822 HD is highly suited for use as sole binder. The dispersion, however, can also be used to modify inorganic binders, such as cement and lime, improving their tensile adhesive strength, flexural strength, deformability, abrasion resistance and processability.

In exterior insulation and finish systems (EIFS), VINNAPAS® 822 HD is an ideal binder for adhesive and base coats - for example, by blending the dispersion with Portland cement - and an ideal sole binder for polymer plasters containing opacifying pigments. This means that it is possible to produce the entire EIFS with only one binder.

By virtue of the low flammability of VINNAPAS® 822 HD, correctly installed EIFS with this composition fall under Fire Class B as per EN 13501-1 (which applies to EIFS).

For typical application fields of VINNAPAS® 822 HD, refer to the section "application". Please discuss additional applications with your WACKER customer representative.

Processing

For each application, customers should always test the compatibility of VINNAPAS® 822 HD before blending with other polymer dispersions. Dispersions with an acidic pH should be adjusted to alkaline before the dispersions are mixed. It is important to ensure that the pH does not fall over time, by (for example) adding calcium carbonate. If mixing produces an opaque film, this does not mean incompatibility, but is often due to the resin particles' different refractive indices.

Since VINNAPAS® 822 HD has a minimum film-forming temperature of approx. 7°C, the addition of a film-forming agent is normally required. Suitable agents are 1) Lusolvan® FBH and 2) Texano!™.

VINNAPAS® 822 HD is stable in the neutral and alkaline pH range. Consequently, it is advisable to first place any acidic additives in a stirring vessel and to adjust their pH to about 8 before adding the dispersion.

Additional information

If the product is used in applications other than those mentioned, the choice, processing and use of it is the sole responsibility of the purchaser. All legal and other regulations must be complied with.

Slight color variations of the dispersible polymer powder may occur without impairing the product's functionality.

Packaging and storage

Packaging

Non-returnable PE drums of 150 kg capacity (standard dispatch quantity: only fully-loaded pallets à 750 kg), non-returnable containers of 1 t capacity and road tankers.

Storage

When the dispersion is stored in tanks, proper storage conditions must be maintained. The product has a shelf life of 6 months starting from the date of receipt 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 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 containers and equipment are not recommended. Corrosion could result in discoloration of the dispersion or blends made from it in further processing. We therefore recommend the use of containers and equipment made of ceramic, rubberized or enameled materials, appropriately finished stainless steel, or plastic (rigid PVC, polyethylene or polyester resin). As polymer dispersions may tend to superficial film formation, skins or lumps may be formed during storage or transportation. A filtration process is thus 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

Detailed safety information is contained in each Material Safety Data Sheet, which can be obtained from our sales offices.

QR Code VINNAPAS® 822 HD



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

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