VINNAPAS® 825 ED

Polymer Dispersions

VINNAPAS® 825 ED is an all-round construction dispersion for two-component dry mix mortars, specifically suited for cement admixtures and two-component cementitious self-leveling compounds. It is based on a semi-flexible terpolymer of vinyl acetate, ethylene and vinyl chloride and belongs to the product class VINNAPAS® ED which means that it enhances the adhesion and mechanical strength of mortars.

Properties

- VINNAPAS® 825 ED is an aqueous dispersion of a vinyl acetate, ethylene, vinyl chloride terpolymer with a 50 % solids content.
- VINNAPAS® 825 ED is ideal for modifying inorganic binders, such as cement, lime and gypsum in conjunction with granular aggregates.
- VINNAPAS® 825 ED can be blended with most VINNAPAS® dispersions and many other aqueous polymer dispersions in any ratio. When blending, it is important to adjust the pH of both dispersions which are to be blended in a pH range in which both dispersions are stable. Storage tests should be carried out to check the compatibility of the mixture.

Technical data

Specification

Property	Condition	Value	Method
Viscosity, dynamic	23 °C | Brookfield, spindle 3 / 20 rpm	1500 - 3500 mPa·s	DIN EN ISO 2555
pH	-	4.5 - 7.5	DIN/ISO 976
Solids content	-	49 - 51 wt. %	EN ISO 3251

General Characteristics

Property	Condition	Value	Method
Minimum film forming temperature	-	approx. 7 °C	DIN ISO 2115
Protective colloid / emulsifier system	-	polyvinyl alcohol	-
Appearance of the dispersion film	-	transparent	Visual
Glass transition temperature	-	approx. 10 °C	specific method
Compatibility with cement	-	very good	specific method
Predominant particle size	-	approx. 800 nm	specific method

These figures are only intended as a guide and should not be used in preparing specifications.

Application details

The most important applications of VINNAPAS® 825 ED include the production of floor screeds, repair mortars and cement-bound construction adhesives. VINNAPAS® 825 ED increases mechanical strength and significantly improves adhesion to the substrate. VINNAPAS® 825 ED modified coatings and screeds are tough and resilient. This dispersion also produces good results in relatively thin screeds. For example, it improves abrasion resistance and reduces the risk of cracking. VINNAPAS® 825 ED contains the ideal amount of antifoam agent for the recommended applications. Addition of VINNAPAS® 825 ED increases the density of the product, reducing penetration by water, petrol and oil.

For typical application fields of VINNAPAS® 825 ED, refer to the section "application". Please discuss additional applications with your WACKER customer representative.

Processing

VINNAPAS® 825 ED can be freely diluted with water, but if diluted below a solids content of 20%, the resin has a slight tendency to settle out when stored for lengthy periods. However, the resin can be homogeneously redispersed simply by stirring or shaking. Suitable thickening agents include cellulose derivatives and inorganic thickening agents. The influence of these additives on the properties of the end products (mortar, screed, adhesives) must always be tested. Salts of polyacrylic acid can greatly delay the setting time of the cement.
It is not usually necessary to add solvents or plasticizers, since VINNAPAS® 825 ED has a minimum film-forming temperature of approx. 7°C.

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 polymer granulate may occure 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

Comprehensive instructions are given in the appropriate Material Safety Data Sheets. These are available on request from WACKER sales offices.

QR Code VINNAPAS® 825 ED

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

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