

VINNAPAS[®] CEF 52



Polymer Dispersions

VINNAPAS[®] CEF 52 is a dispersion of a vinyl chloride, ethylene and vinyl ester terpolymer.

VINNAPAS[®] CEF 52 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[®] CEF 52 can be used to formulate very hydrophobic products.

Properties

- Excellent water resistance
- Very good alkaline resistance
- Very good flameresistance
- Good compatibility with cement

Technical data

Specification

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

General Characteristics

Property	Condition	Value	Method
Density	-	approx. 1.13 g/cm ³	DIN EN ISO 2811-1
Minimum film forming temperature	-	approx. 7 °C	DIN ISO 2115
Frost resistance	-	protect from freezing	specific method
Predominant particle size	-	approx. 0.3 µm	specific method
Protective colloid / emulsifier system	-	ionic and nonionic surfactants	-
Filler and pigment compatibility	-	very good	specific method
Appearance of the dispersion film	-	clear, glossy	Visual
Film surface	-	tack free	specific method
Elongation at break	-	approx. 450 %	DIN EN ISO 527-3
Glass transition temperature Tg DSC	-	approx. 14 °C	specific method
Electrolyte stability	-	very good	specific method
Film-forming aids, solvents, plasticizers	-	1,6 wt. % fatty acid ester based on dispersion %	specific method
Tensile strength	-	approx. 5.0 N/mm ²	DIN EN ISO 527-3

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

- DO NOT USE Silicone Resins & Silicate Paints
- Exterior Paints & Coatings
- Fire-Resistant Paints

Application details

VINNAPAS® CEF 52 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® CEF 52 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® CEF 52 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® CEF 52, correctly installed EIFS with this composition fall under Fire Class B as per EN 13501-1 (which applies to EIFS).

Processing

For each application, customers should always test the compatibility of VINNAPAS® CEF 52 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® CEF 52 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) Texanol™.

VINNAPAS® CEF 52 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 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. VINNAPAS® CEF 52 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 VINNAPAS® CEF 52, 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

VINNAPAS® CEF 52 is adequately preserved during transportation and storage if kept in the original, unopened containers. When stored in tanks, the dispersion should be modified with a preservative to prevent microbial contamination. Suitable measures should be taken to ensure that the tanks are properly clean. In storage tanks in which the product is not stirred, it is advisable to cover the surface of the dispersion with 1 - 2 cm of water, to which a preservative has been added. This will prevent skin formation and microbial contamination. In the case of storage in silos, it is important that the air drawn into the silo when the product is discharged is also kept free of germs. As a rule, all finished products manufactured from polymer dispersions also require preservation. The type and extent of preservation will depend on the raw materials used and the anticipated sources of contamination. The compatibility and effectiveness of the preservatives should be checked for a given formulation. Preservative manufacturers will be able to advise you on the type and amount of conservation agent to use.

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® CEF 52



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

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