VINNAPAS® 550 ED

Polymer Dispersions

VINNAPAS® 550 ED is a multi-purpose construction dispersion, specifically suited for cement admixtures, the formulation of two-component cementitious waterproofing membranes as well as the production of primers. The dispersion is based on a very flexible copolymer of vinylacetate and ethylene and belongs to the product class VINNAPAS® ED which means that it enhances adhesion and flexibility of mortars.

Properties

- VINNAPAS® 550 ED is an aqueous dispersion of vinyl acetate and ethylene copolymer with a 53% solids content.
- The dispersion is produced without the use of plasticizers.
- VINNAPAS® 550 ED is particularly suited for modifying mineral mortars. It improves the adhesion to inorganic and organic substrates, as well as abrasion resistance und flexural strength.

Technical data

Specification

<table>
<thead>
<tr>
<th>Property</th>
<th>Condition</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity, dynamic</td>
<td>-</td>
<td>100 - 400 mPa·s</td>
<td>DIN EN ISO 2555</td>
</tr>
<tr>
<td>pH</td>
<td>-</td>
<td>3.0 - 4.5</td>
<td>DIN/ISO 976</td>
</tr>
<tr>
<td>Solids content</td>
<td>-</td>
<td>51.5 - 54.5 wt. %</td>
<td>EN ISO 3251</td>
</tr>
</tbody>
</table>
General Characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Condition</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum film forming temperature</td>
<td>-</td>
<td>approx. 0 °C</td>
<td>DIN ISO 2115</td>
</tr>
<tr>
<td>Predominant particle size</td>
<td>-</td>
<td>approx. 900 nm</td>
<td>specific method</td>
</tr>
<tr>
<td>Protective colloid / emulsifier system</td>
<td>-</td>
<td>polyvinyl alcohol</td>
<td>-</td>
</tr>
<tr>
<td>Appearance of the dispersion film</td>
<td>-</td>
<td>transparent</td>
<td>Visual</td>
</tr>
<tr>
<td>Glass transition temperature</td>
<td>-</td>
<td>approx. -5 °C</td>
<td>specific method</td>
</tr>
<tr>
<td>Compatibility with cement</td>
<td>-</td>
<td>very good</td>
<td>specific method</td>
</tr>
</tbody>
</table>

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

- Two Component Cementitious Waterproofing Membrane
- Primer
- Cement Admixtures

Application details

Two-component waterproofing membranes, primers & cement admixes are the most important applications for VINNAPAS® 550 ED. In these applications VINNAPAS® 550 ED improves adhesion, abrasion resistance and flexural strength. For enhanced compressive and flexural strength, we recommend adding a suitable defoaming agent or modifying the dry component with a powder defoamer.

For further information regarding applications of VINNAPAS® 550 ED, refer to the section "application". Please discuss additional applications with your WACKER customer representative.

Processing:

VINNAPAS® 550 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.

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. VINNAPAS® 550 ED 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, 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® 550 ED 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.

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

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info@wacker.com, www.wacker.com

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