VINNAPAS® CEZ 3031

Polymer Dispersions

VINNAPAS® CEZ 3031 is a medium particle size, protective colloid-containing aqueous dispersion of a terpolymer of vinyl acetate, ethylene and vinyl chloride.
The principal feature of VINNAPAS® CEZ 3031 is its wide range of uses in coating systems containing opacifying pigments.
The dispersion is low in odor and is produced without the use of alkyl phenol ethoxylate (APEO) containing compounds.

Properties

• Great Versatility
• High Elasticity
• Very good saponification resistance
• Due to the low favorable minimum film forming temperature of approx. +2°C there is no need to use coalescent agents with VINNAPAS® CEZ 3031

Technical data

Specification

<table>
<thead>
<tr>
<th>Property</th>
<th>Condition</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>-</td>
<td>4 - 5</td>
<td>DIN/ISO 976</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>23 °C</td>
<td>Brookfield, spindle 5 / 20 rpm</td>
<td>6000 - 12000 mPa·s</td>
</tr>
<tr>
<td>Solids content</td>
<td>-</td>
<td>49 - 51 %</td>
<td>DIN 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>Film surface</td>
<td>-</td>
<td>slightly tacky</td>
<td>specific method</td>
</tr>
<tr>
<td>Appearance of the dispersion film</td>
<td>-</td>
<td>clear, glossy</td>
<td>Visual</td>
</tr>
<tr>
<td>Filler and pigment compatibility</td>
<td>-</td>
<td>very good</td>
<td>specific method</td>
</tr>
<tr>
<td>Protective colloid / emulsifier system</td>
<td>-</td>
<td>ionic and nonionic surfactants and polymer compounds</td>
<td>-</td>
</tr>
<tr>
<td>Predominant particle size</td>
<td>-</td>
<td>approx. 0.7 (\mu m)</td>
<td>specific method</td>
</tr>
<tr>
<td>Frost resistance</td>
<td>-</td>
<td>protect from freezing</td>
<td>specific method</td>
</tr>
<tr>
<td>Minimum film forming temperature</td>
<td>-</td>
<td>approx. 2 °C</td>
<td>DIN ISO 2115</td>
</tr>
<tr>
<td>Density</td>
<td>-</td>
<td>approx. 1.09 g/cm³</td>
<td>DIN EN ISO 2811-1</td>
</tr>
<tr>
<td>Electrolyte stability</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

- External Thermal Insulation Composite Systems (ETICS/EIFS)
- Interior Paints
- Fire-Resistant Paints
- Renders & Plasters
- Exterior Paints
Application details

VINNAPAS® CEZ 3031 has proved to be an outstanding binder in many fields of application and versatility is its special strength.

VINNAPAS® CEZ 3031 is particularly recommended to produce masonry paints with good hiding power and great flexibility. Thanks to its good resistance to saponification, VINNAPAS® CEZ 3031 can be employed as the organic polymer component of organo-silicate paints and plasters. To ensure a good shelf life, the formulation must be carefully built around the binder.

To achieve optimum weathering resistance, opaque pigments should be used to ensure adequate pigmentation. Due to its minimum film forming temperature of approx. +2°C VINNAPAS® CEZ 3031 doesn’t need any coalescence aids for filming and so it’s a very suitable binder for paints which complies with strict eco-labeling requirements.

VINNAPAS® CEZ 3031 has proved itself as an excellent binder for synthetic resin plasters, especially in exterior insulation and finish systems (EIFS). In such a system, VINNAPAS® CEZ 3031 can also be used as binder for the styrene-panel adhesive and for the base coat. In other words, only one binder is needed for the entire system. The dispersion is readily compatible with Portland cement and hardly influences its setting time - a fact which is exploited to increase the water resistance of the adhesive and base coat. By virtue of the low flammability of VINNAPAS® CEZ 3031, correctly installed EIFS with this composition fall under Fire Class B as per EN 13501-1 (which applies to EIFS). Interior plasterwork based on VINNAPAS® CEZ 3031 does not require the use of film-forming agents and has the advantage of producing very little odor while being applied.

VINNAPAS® CEZ 3031 can be blended with the most anionic and/or nonionic aqueous polymer dispersions. However, the compatibility of the mixture should be tested by means of a storage test. This is because, despite good polymer compatibility, differences in the refractive indices sometimes cause cloudiness in the dry dispersion film.

VINNAPAS® CEZ 3031 is compatible with common pigments and extender and is easy to process.

VINNAPAS® CEZ 3031 forms a film (as per ISO 2115) at 2 °C and can therefore usually be processed - especially for interior applications - without the addition of film-forming agents.

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® CEZ 3031 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. 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 resin) is recommended. As polymer dispersions may tend to superficial film formation, skins or lumps may form during storage or transportation. Filtration is therefore recommended prior to utilization of the product.

Preservation for Transport, Storage and further Processing

VINNAPAS® CEZ 3031 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 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® CEZ 3031