VINNAPAS® 5043 N
Dispersible Polymer Powders

VINNAPAS® 5043 N is a dispersible polymer powder for dry mix mortars, specifically suited for ETICS. It is based on a very flexible copolymer of vinyl acetate and ethylene and belongs to the product class VINNAPAS® N which means that it has a neutral effect on rheology and provides the basic properties adhesion and flexibility. VINNAPAS® 5043 N is part of our standard range, offering you the best-in-class solutions.

Properties

- VINNAPAS® 5043 N is a copolymer powder of vinyl acetate and ethylene and is dispersible in water.
- Because of its relatively high ethylene content, this resin is soft and flexible. Its glass transition temperature (Tg) is below the freezing point of water.
- Compounds modified with VINNAPAS® 5043 N exhibit improved adhesion, flexural strength, deformability, abrasion resistance and are easier to process. Leveling, thixotropy and water retention are essentially unaffected.
- The product is ideal for use in combination with other mortar additives intended to enhance specific properties.
- VINNAPAS® 5043 N contains a fine mineral filler as an antiblocking agent. It is produced without the addition of organic solvents, plasticizers and film-forming agents.
- VINNAPAS® 5043 N has no effect on rheological properties and is a dispersible polymer powder in the lower Tg range. It is suitable for formulating highly flexible compounds with very good adhesion to organic substrates (polystyrene) and end products with low emissions.
Technical data

Specification

<table>
<thead>
<tr>
<th>Property</th>
<th>Condition</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk density</td>
<td>-</td>
<td>405 - 555 kg/m³</td>
<td>DIN EN ISO 60</td>
</tr>
<tr>
<td>Ash content</td>
<td>1000 °C</td>
<td>max. 13 %</td>
<td>specific method</td>
</tr>
<tr>
<td>Particle size</td>
<td>&gt; 400 µm</td>
<td>max. 4 %</td>
<td>DIN EN ISO 4610</td>
</tr>
<tr>
<td>Solids content</td>
<td>-</td>
<td>min. 98 %</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>Appearance</td>
<td>-</td>
<td>white to light beige powder</td>
<td>Visual</td>
</tr>
<tr>
<td>Minimum film forming temperature</td>
<td>-</td>
<td>0 °C</td>
<td>DIN ISO 2115</td>
</tr>
<tr>
<td>Protective colloid / emulsifier system</td>
<td>-</td>
<td>polyvinyl alcohol</td>
<td>-</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

- Adhesive and Embedding Mortars

Application details

For typical application fields of VINNAPAS® 5043 N, refer to the section *application*. Please discuss additional applications with your WACKER customer representative.

Processing

For the production of ready-mixed dry mortars, such as adhesives and patching compounds, blend VINNAPAS® 5043 N with the other dry ingredients in appropriate equipment. Temperatures should not be allowed to rise excessively during mixing because otherwise the dispersible polymer powder could agglomerate by virtue of its thermoplastic properties. The mortar is prepared for use by adding the recommended amount of water and mixing mechanically or by hand. Since hand mixing generates little shear force, we recommend allowing the fresh mortar to slake for 5 minutes and then stirring it again. This is usually unnecessary where mechanical mixers are employed.
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

25 kg paper bags, Big Bags or bulk on request.

Storage

During storage, protect VINNAPAS® 5043 N from contact with moisture. Prolonged storage at temperatures above 30 °C, including in combination with pressure load, humidity or exposure to sunlight, may result in blocking. Carefully seal any open containers and store them in suitable conditions. We recommend storing VINNAPAS® 5043 N in a warehouse that provides cool and dry conditions. Do not store VINNAPAS® 5043 N for more than six months, starting from the point at which it was received. If the product is kept for longer than that, it can still be used, but users are advised, in this case, to check the properties required for the intended 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.