Mowilith LD 167

Technical Data Sheet

Effective date: 2013/01/20

Characteristics

Mowilith LD 167 is an aqueous polymer dispersion based on vinyl acetate.

Stabilization

Polyvinyl alcohol

Industries

Mowilith LD 167 is a raw material for the adhesives industry. It is used in the formulation of

- Adhesives for paper packaging and converting
- Adhesives for book binding
- Wood glues
- Parquet adhesives

Why Mowilith LD 167?

- Very fast increase in bond strength after application
- Shear stable to a large extent
- Compatible with the most commonly used solvents and plasticizers

Performance may vary depending on your formulation. Please contact our Application Technology Group to assist you.

Supply Specification

<table>
<thead>
<tr>
<th>Supply Specification</th>
<th>Adjusted Standard*</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solids content (130 °C; 30 min)</td>
<td>ISO 3251</td>
<td>%</td>
<td>59 – 61</td>
</tr>
<tr>
<td>Brookfield viscosity (25 °C; 6/20)</td>
<td>ISO 2555</td>
<td>mPas</td>
<td>20000 – 40000</td>
</tr>
<tr>
<td>pH value</td>
<td>ISO 976</td>
<td></td>
<td>5.0 – 6.0</td>
</tr>
</tbody>
</table>

Further Typical Properties

<table>
<thead>
<tr>
<th>Further Typical Properties</th>
<th>Adjusted Standard*</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum film forming temperature</td>
<td>ISO 2115</td>
<td>°C</td>
<td>approx. 14</td>
</tr>
<tr>
<td>Glass transition temperature</td>
<td>ISO 16805</td>
<td>°C</td>
<td>approx. 40</td>
</tr>
<tr>
<td>Appearance of polymer film</td>
<td></td>
<td></td>
<td>slightly opaque, tack-free</td>
</tr>
</tbody>
</table>

* Standard adjusted to Celanese method. Further details regarding the test method can be made available on request.

Your future is our focus...worldwide.
Guidelines for Preservation and Storage

The dispersion contains some initial biocides to impede attack by microorganisms.

In order to protect the product appropriately against microbiological attack after the first opening and storage thereafter in opened drums, tanks or other storage facilities, please consider adding a suitable preservative. All tanks and pipework should be kept adequately clean. For bulk storage, regular stirring is common practice.

Mowilith LD 167 has a minimum shelf life of 6 months from the dispatch date in its original unopened packaging, provided the product is stored hygienically at temperatures between 5 and 35 °C, avoiding frost and direct sunlight.

Skins or lumps can form during storage and transport of the dispersion due to its film forming nature. A filtration or sieve process is recommended before further processing.

Product Safety, Regulatory Status and Environmental Protection

Please employ the usual protective measures when handling aqueous polymer emulsions. Further product safety or product regulatory information can be obtained online from our safety data sheets (http://www.celanese-emulsions.com/msds/) and our regulatory data sheets which are available on request.

As of its effective date, this Technical Data Sheet supersedes and is in lieu of all former Technical Data Sheets of Mowilith LD 167.