Adwel® 1651

Aqueous Polyurethane Dispersion

Technical Data Sheet

Name: Adwel® 1651
Revision Date: 2018-09-06

Product Description

Adwel® 1651 is an aliphatic anionic polyurethane dispersion that can be used with polyisocyanate as a two-component waterborne adhesive for laminating flexible substrates including polyolefin, polyester, nylon. It is also recommended for non-food applications where similar films and performances are required. Biocide: CMIT/MIT 0.049‰ and MIT 0.100 ‰.

Properties

1. High bonding strength
2. Good construction properties
3. Applicable in a variety of substrates

Characteristic data*

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Unit</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Milky white liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight Solids</td>
<td>45±1</td>
<td>%</td>
<td>WHPU/T011-571-2017 (5cm,150°C,20min)</td>
</tr>
<tr>
<td>pH</td>
<td>6.0-9.0</td>
<td></td>
<td>GB/T 14518-1993</td>
</tr>
<tr>
<td>Viscosity</td>
<td>10-500</td>
<td>mPa·s</td>
<td>GB/T 2794-2013 (Brookfield,LV,62#/60rpm,25°C)</td>
</tr>
<tr>
<td>OH content</td>
<td>1.5</td>
<td>%</td>
<td>Theoretical value</td>
</tr>
<tr>
<td>Density</td>
<td>1.04-1.09</td>
<td>g/cm³</td>
<td>GB/T 4472-2011</td>
</tr>
</tbody>
</table>

*These properties are typical but do not constitute specifications.

Handling and Precautions

1. If the product needs to be diluted, we recommend deionized water must be used; Tap water may cause flocculation or demulsification.
2. After mixed with polyisocyanate curing agent, it should be used up in 4 hours, and the residues should not be poured back to the primary product.
Adwel® 1651

3. The laminated products need to be cured to achieve good bonding strength, and the curing condition is recommended at 50°C for 24 hours.

4. Due to the different lamination process and materials, pretests always should be carried out.

Storage

The product should be stored in dry conditions above 5°C and below 35°C with the integrity of the packaging, and prevent direct sunlight. The validity of this product is for 6 months, performance assessment is recommended before use after shelf life. The product should be protected from freezing during storage. It is suggested to filter before application and use up once the package is open.

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