Chemical Nature

A hyperbranched polyester polyol designed as a co-binder for 2K polyurethane coatings and 1K baking enamels for improved performance.

Properties

Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>clear liquid</td>
</tr>
<tr>
<td>Solids content</td>
<td>% ~ 70</td>
</tr>
<tr>
<td>Hydroxyl value of solids</td>
<td>mg KOH/g ~ 280</td>
</tr>
<tr>
<td>Acid value of solids</td>
<td>mg KOH/g ~ 85</td>
</tr>
<tr>
<td>Viscosity at 23°C</td>
<td>cP ~ 4,400</td>
</tr>
</tbody>
</table>

Other properties of the resin

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density at 20°C as supplied</td>
<td>g/cm³ ~ 1.10</td>
</tr>
<tr>
<td>Hydroxyl eq. wt. of solids</td>
<td>g/eq ~ 200</td>
</tr>
<tr>
<td>Hydroxyl eq. wt. as supplied</td>
<td>g/eq ~ 286</td>
</tr>
<tr>
<td>Glass transition temperature</td>
<td>°C ~ 18</td>
</tr>
</tbody>
</table>

Compatible with

Basonol HPE 1170 B is compatible with other resins, crosslinkers, and additives commonly used in 2K polyurethane coatings and 1K baking enamels. It exhibits good compatibility with alcohols and ester solvents, although limited compatibility with ketones and aromatic solvents in some situations. Compatibility should be evaluated before further testing.

*These figures should be taken for comparison purposes only. All that can be obtained from it is an idea of the magnitude concerned.

Application

Features

Basonol HPE 1170 B has low impact on VOC in high solids coating systems. It offers improved early and final hardness, improved chemical resistance, low hydrolysis sensitivity, and excellent weathering performance. When used as a co-binder in 2K polyurethane coatings, Basonol HPE 1170 B additionally exhibits longer potlife and improved reflow behavior.

Safety

General

The usual safety precautions when handling chemicals must be observed. These include the measures described in Federal, State and Local health and safety regulations, thorough ventilation of the workplace, good skin care and wearing of protective goggles.

Safety Data Sheet

All safety information is provided in the Safety Data Sheet for Basonol HPE 1170 B.

Storage

Please refer to the "Handling and Storage of Polymer Dispersions" brochure.
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