Vesmody® U905
Hydrophobic Modified Ethoxylated Urethane

Technical Data Sheet

Name: Vesmody® U905
Revision Date: 2018-07-11

Product Description
Vesmody® U905 is a nonionic urethane rheology modifier, a suitable thickening agent for any waterborne painting system, especially for textile adhesive coatings, architectural coating and industry coating. Vesmody® U905 is a high solid content strong pseudoplastic PU thickener with excellent thickening efficiency, designed to provide high low-shear viscosity with extreme shear thinning rheology, this behavior allows excellent sag resistance with minimal effect on flow and levelling. Vesmody® U905 has excellent stableness to colorant in formulations; it is eminently suitable in pigmented paint. Solvent: water/DGBE. Biocide: (CMIT/MIT = 3:1) 10 ppm, MIT 200 ppm.

Properties
1. Tin-free, Apeo free
2. Excellent low-shear viscosity thickening efficiency
3. Excellent stableness to colorant
4. Excellent water and alkali resistance
5. Excellent leveling and sag resistance
6. Use over a wide pH range

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>Light milk-white to yellow milky liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight Solids</td>
<td>39-41</td>
<td>%</td>
<td>WHPU/T011-571-2017 (4cm,150°C,20min)</td>
</tr>
<tr>
<td>pH</td>
<td>6.0-7.0</td>
<td></td>
<td>GB 6920-1986, 25°C</td>
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<tr>
<td>Viscosity</td>
<td>30000-38000</td>
<td>mPa·s</td>
<td>Brookfield RV, 5#/8rpm, 25°C</td>
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<tr>
<td>Density</td>
<td>1.04±0.05</td>
<td>g/cm³</td>
<td>GB/T 4472-2011, 25°C</td>
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<tr>
<td>Chemistry</td>
<td>HEUR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Wanhua Chemical Group Co., Ltd.
Vesmody® U905

*These properties are typical but do not constitute specifications.

Instructions for use

Vesmody® U905 is supplied as a pourable liquid, it is easy to use and can be added in any formulation time directly or after dilution. Depending on the character and amount of the emulsion as well as filler and pigment, the amount of the addition is variable, probably 0.1-2.0% by weight of the formulation in its supplied form. The exact amount required in each formulation should be determined by pre-trials.

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 12 months, performance assessment is recommended before use after shelf life. The product should be protected from freezing during storage. After opening the packing, suggested to use up one time.

Disclaimer: Wanhua Chemical Group Co., LTD. recommends that any customers of this material should check with Materials Safety Data Sheet (MSDS) for details about safely handling this material. We also suggest that you contact the suppliers of any other materials used in our recommended formulations and suggestions for appropriate health and safety regulations prior to use. The information contained herein is believed to be reliable. However, nothing in this technical sheet should be considered as a representation of warranty, express or implicit, regarding the product characteristics, application, quality, safety, merchantability or fitness for a particular purpose. Nothing contained herein is to be considered as permission, recommendation, nor as an inducement to practice any patented invention without permission of the patent owner.