CR-3
Water-dispersible Isocyanate Crosslinker for Aqueous Acrylic Systems

Description

CR-3 is a hydrophilically modified, aliphatic polyisocyanate based on hexamethylene diisocyanate (HDI).

Typical Properties

These properties are typical but do not constitute specifications.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, liquid</td>
</tr>
<tr>
<td>NCO contents %</td>
<td>18.0 ± 0.5</td>
</tr>
<tr>
<td>pH</td>
<td>7.0 - 8.5</td>
</tr>
<tr>
<td>Viscosity @ 23°C, mPa.s</td>
<td>4500 ± 1500</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 250°C</td>
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</table>

Application

Because of its hydrophilic character, CR-3 is easily emulsified in the aqueous phase. It is primarily used as the crosslinker for aqueous acrylic polymers. The addition of CR-3 to acrylic dispersions can improve their property profile, e.g., improved key adhesion to difficult substrates, improved heat, and water resistance.

As with any product, the use of CR-3 in a given application must be tested (including but not limited to field testing) in advance by the user to determine suitability.

Properties

Dependant upon the application, typical addition levels vary from 1-5% weight upon wet emulsion.

It is important to note that this material will give a limited "pot-life," i.e., the time in which the product can be used in combination with an acrylic emulsion of approximately 4-8 hours dependant upon the level of addition and the acrylic dispersion. After this period, the crosslinking properties will be severely diminished.

Storage

CR-3 is sensitive to moisture. When stored in sealed containers at temperatures not exceeding 30°C, the product will remain stable for at least 6 months. During storage, the viscosity may increase slightly.

Safety Information

Material Safety Data Sheets (MSDS) are available for all Rohm and Haas products. These sheets contain important information that you may need to protect your employees and customers against any known health and safety hazards associated with our products. We recommend that you obtain copies of our MSDS from your local Rohm and Haas technical representative before using our products in your facilities. We also suggest that you contact your suppliers of other materials recommended for use with our products for appropriate health and safety precautions before using them.
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