Hydroxyl Terminated Polybutadiene Resin

DESCRIPTION:
Poly bd® R45 M resin is a liquid hydroxyl terminated polymer of butadiene. Poly bd® resins have primary, predominantly allylic hydroxy groups that exhibit high reactivity in chemical reactions for the preparation of derivatives.

PRODUCT HIGHLIGHTS / PERFORMANCE PROPERTIES:
- Electrical insulative properties
- High solids loading
- Hydrolytically stable
- Good water resistance
- Low moisture permeability
- Resistance to aqueous acids and bases
- Low temperature flexibility
- Excellent adhesion to a variety of substrates

SUGGESTED APPLICATIONS:
- Adhesives and sealants
- Coatings
- Electrical potting and encapsulation
- Polymer modification
- Polyurethanes
- Binders

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES:

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight (Mn)</td>
<td>GPC</td>
<td>2,800</td>
<td>g/mol</td>
</tr>
<tr>
<td>1,2 Vinyl</td>
<td>Proton NMR/ IR</td>
<td>20</td>
<td>wt. %</td>
</tr>
<tr>
<td>Viscosity @ 30°C</td>
<td>ATO-8028</td>
<td>4,200</td>
<td>cps</td>
</tr>
<tr>
<td>Tg</td>
<td>DSC</td>
<td>-76</td>
<td>°C</td>
</tr>
<tr>
<td>Specific Gravity @ 23°C</td>
<td>ATO-8026</td>
<td>0.90</td>
<td>-</td>
</tr>
<tr>
<td>-OH (Groups/Chain)</td>
<td>Titration/VPO</td>
<td>2.3</td>
<td>-</td>
</tr>
</tbody>
</table>

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