Cloisite® 30B

Typical Physical Properties Bulletin

Description:
Cloisite® 30B is a natural montmorillonite modified with a quaternary ammonium salt.

Designed Used:
Cloisite® 30B is an additive for plastics to improve various plastic physical properties, such as reinforcement, HDT, CLTE and barrier.

Typical Properties:

<table>
<thead>
<tr>
<th>Treatment/Properties:</th>
<th>Organic Modifier (1)</th>
<th>Modifier Concentration</th>
<th>% Moisture</th>
<th>% Weight Loss on Ignition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloisite® 30B</td>
<td>MT2EtOH</td>
<td>90 meq/100g clay</td>
<td>&lt; 2%</td>
<td>30%</td>
</tr>
</tbody>
</table>

\[
\text{CH}_3\text{CH}_2\text{OH}
\]

\[
\text{CH}_3 - \text{N}^+ - \text{T}
\]

\[
\text{CH}_2\text{CH}_2\text{OH}
\]

Where T is Tallow (~65% C18; ~30% C16; ~5% C14)

Anion: Chloride

(1) MT2EtOH: methyl, tallow, bis-2-hydroxyethyl, quaternary ammonium
Typical Dry Particle Sizes: (microns, by volume)

<table>
<thead>
<tr>
<th></th>
<th>10% less than:</th>
<th>50% less than:</th>
<th>90% less than:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2µm</td>
<td>6µm</td>
<td>13µm</td>
</tr>
</tbody>
</table>

Color: Off White

Density:

<table>
<thead>
<tr>
<th></th>
<th>Loose Bulk, lbs/ft³</th>
<th>Packed Bulk, lbs/ft³</th>
<th>Density, g/cc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14.25</td>
<td>22.71</td>
<td>1.98</td>
</tr>
</tbody>
</table>

X Ray Results: \( d_{001} = 18.5\AA \)

For additional information or technical assistance contact Southern Clay Products, Inc. toll free at 800-324-2891.

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