Uniplex® 171
Plastic Additives / Plasticizer

Description
Uniplex 171 is an excellent plasticizer for thermosetting and thermoplastic resins.

Chemical composition
o/p-Toluenesulfonamide (OPTSA)

CAS Registry Number
70-55-3 / 88-18-7

Supply form
White crystalline solid particles

Typical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Nominal Value</th>
<th>Unit</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>99.0 min.</td>
<td>%</td>
<td>Gas chromatography OPTSA</td>
</tr>
<tr>
<td>Content</td>
<td>PTSA: 65 – 75 OTSA: 25 – 35</td>
<td>%</td>
<td>Gas chromatography</td>
</tr>
<tr>
<td>Hazen color value (50% in acetone)</td>
<td>50 max.</td>
<td>--</td>
<td>Hazen</td>
</tr>
<tr>
<td>Water content</td>
<td>1.0 max.</td>
<td>%</td>
<td>Karl Fischer</td>
</tr>
<tr>
<td>Melting range</td>
<td>approx. 110 – 117</td>
<td>°C</td>
<td>Thermometric</td>
</tr>
<tr>
<td>Turbidity</td>
<td>30 max.</td>
<td>NTU</td>
<td>Photometric</td>
</tr>
<tr>
<td>Content inorganic chloride</td>
<td>0.1 max.</td>
<td>%</td>
<td>Titration</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>approx. 1.35</td>
<td>--</td>
<td>Gravimetric</td>
</tr>
</tbody>
</table>

The analytical data are general guide values.

Storage
If stored properly, the product keeps for 2 years.

Packaging
Fibre drums

General properties
Uniplex 171 is a mixture of ortho toluene sulfonamide (OTSA) and para toluene sulfonamide (PTSA).
Uniplex 171 is an excellent plasticizer for thermosetting and thermoplastic resins.
Applications

Uniplex 171
1. Imparts good gloss and wetting action to melamine, urea and phenolic resins improving mixing of filled product.
2. Increases hardness of mouldings made with urea resins.
3. Increases stability and compatibility of melamine resins; better strength, abrasion resistance and higher gloss are obtained.
4. Reduces viscosity and improves flow of phenolic resins.
5. Increases flexibility with only minor decreases in tensile strength in nylon and other polyamide resins.

Uniplex 171 is used when US regulations and recommendations governing food contacting applications need to be met. More information is available on request.

Handling & Safety

A receiving inspection is recommended. The product should be stored in its tightly sealed original container in a cool, dry place. Once opened, containers should be resealed tightly after removal of product. Consult material safety data sheet (MSDS) for additional handling information on Uniplex 171.

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