Uniplex® 512
Plastic Additives / Plasticizer

Description
Uniplex 512 is a low melting, waxy, solid plasticizer. The product is used as plasticizer for coatings application, as a thermoplastic processing aid and as a cleaner for adhesives.

Chemical composition
Neopentyl Glycol Dibenzoate; 2,2-Dimethyl-propanediol-1,3 Dibenzoate

CAS Registry Number
4196-89-8

Supply form
Waxy, white solid

Typical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Nominal Value</th>
<th>Unit</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Waxy, white solid</td>
<td>-</td>
<td>Visual</td>
</tr>
<tr>
<td>Content</td>
<td>98 min.</td>
<td>%</td>
<td>Gas chromatography as benzoate esters</td>
</tr>
<tr>
<td>Acidity</td>
<td>0.1 max.</td>
<td>%</td>
<td>Titration as benzoic acid</td>
</tr>
<tr>
<td>Hazen colour number</td>
<td>100 max.</td>
<td>--</td>
<td>Hazen (20% in 1:1 Acetone/Xylene)</td>
</tr>
<tr>
<td>Water content</td>
<td>0.1 max.</td>
<td>%</td>
<td>Karl Fischer</td>
</tr>
<tr>
<td>Hydroxyl Number</td>
<td>8 max.</td>
<td>mg KOH/g</td>
<td>Titration</td>
</tr>
<tr>
<td>Melting point</td>
<td>approx. 49</td>
<td>°C</td>
<td>Thermal</td>
</tr>
</tbody>
</table>

The analytical data are general guide values.

Storage
Uniplex 512 is sensitive to heat and tend to agglomerate. If correctly stored and kept in the original sealed package, the shelf life is at least 24 months.

Packaging
Drums, cardboard boxes
General properties
Uniplex 512 is a low melting waxy solid plasticizer. This solid dibenzoate has low volatility, a good ultraviolet light stability and is compatible with several polymers. Uniplex 512 is used as thermoplastic processing aid, as an effective plasticizer for coatings application, and as a cleaner for adhesives.

Applications
Uniplex 512 is used predominately as thermoplastic processing aid. These uses include:
1. Incorporation in polycarbonate or talc-filled polypropylene to improve injection moulding by cycle-time reduction.
2. Incorporation in rigid vinyl compounds as an extrusion aid.
3. Incorporation in thermoplastic polyesters (e.g. PBT, PCT, PET) to aid crystal growth during nucleation.

Uniplex 512 is an effective plasticizer for coatings application, particularly in acrylic-based coatings where excellent ultraviolet light stability is required.

Uniplex 512 is useful as a cleaner for adhesives, especially to clean hot melt coating and laminating equipment.

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 512.

® = registered trade mark

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold and our advisory service is given in accordance with the current version of our General Conditions of Sale and Delivery.

LANXESS Deutschland GmbH
Business Unit Additives
Kennedyplatz 1
D-50569 Cologne, Germany
http://add.lanxess.com