Triacetin

Chemical composition: Glyceryl triacetate

CAS reg. no.: 102-76-1

Supply form: water-clear liquid

Health and safety information: Relevant safety data, information and labelling requirements can be found in Safety Data Sheet no. 033492.

Specified properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Nominal value</th>
<th>Unit</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refractive index (n_D^{20})</td>
<td>1,4305 – 1,4325</td>
<td>-</td>
<td>DIN EN ISO 6320 (method based on)</td>
</tr>
<tr>
<td>Free acetic acid</td>
<td>max. 30</td>
<td>ppm</td>
<td>DIN ISO 2114 (method based on)</td>
</tr>
<tr>
<td>Hazen colour</td>
<td>max. 15</td>
<td>-</td>
<td>DIN ISO 6271</td>
</tr>
<tr>
<td>Water content</td>
<td>max. 0.1</td>
<td>%</td>
<td>DIN 51 777</td>
</tr>
</tbody>
</table>

Additional product information:

<table>
<thead>
<tr>
<th>Property</th>
<th>Typical value</th>
<th>Unit</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density at 20 °C</td>
<td>approx. 1.155</td>
<td>g/cm³</td>
<td>DIN 51 757</td>
</tr>
<tr>
<td>Viscosity at 20 °C</td>
<td>approx. 23</td>
<td>mPas</td>
<td>DIN 53 015</td>
</tr>
<tr>
<td>Saponification value</td>
<td>approx. 770</td>
<td>mg KOH/g</td>
<td>DIN 53 401</td>
</tr>
<tr>
<td>Flash point, open cup</td>
<td>approx. 140</td>
<td>°C</td>
<td>ISO 2592</td>
</tr>
<tr>
<td>Boiling point at 13 hPa</td>
<td>approx. 140</td>
<td>°C</td>
<td>DIN 53 171</td>
</tr>
</tbody>
</table>
Product description
Triacetin is a clear, colourless acetate ester used for example in the manufacture of cigarette filters. Triacetin is also used for plasticising NBR and cellulose derivatives.

Storage stability
Under suitable conditions, Triacetin can be stored for one year.
Triacetin can be stored in a stainless steel tank (V4A; material no. 1.4571 [AISI 316Ti]).

Solubility
Triacetin is readily soluble in aromatic hydrocarbons and most organic solvents. It is insoluble in aliphatic hydrocarbons, mineral oils, and vegetable and animal oils. Solubility in water is low.

Packaging
Road tankers
230 kg drums

General properties
The major features of Triacetin are:

- excellent suitability for the solidification of acetyl cellulose fibres for the manufacture of cigarette filters
- very good dissolving power for a number of organic substances
- good plasticising effect for various plastics such as celluloseacetates or celluloseacetobutyrates
- good plasticising effect for cellulose-based paints
- good compatibility with natural and synthetic rubber
- good light resistance

Applications
Triacetin is used for the solidification of acetyl cellulose fibres in the manufacture of cigarette filters. The water content must be kept constant to achieve constant solidification.
Triacetin is also used as a support for flavourings and essences in the food industry and as a plasticiser for chewing gum.
In technical applications, Triacetin is used for example as a core sand binder in the metal foundry sector. Another application is inks and printing inks. Triacetin is used as a highly-effective plasticiser for cellulose-based plastics.

The above formulation is intended solely as a guide for our business partners and others interested in our products. As the conditions of use and application of the suggested formulation are beyond our control, it is imperative that it be tested to determine, to your satisfaction, whether it is suitable for your intended use(s) and application(s). This application-specific analysis at least must include testing to determine suitability from a technical, as well as health, safety and environmental standpoints. Further, although the ingredients, quantities thereof and properties of compounds or finished goods mentioned herein reflect our recommendation at the time of publication, this guide may not be subject to continuous review and/or updating, and you agree that use is undertaken at your sole risk. All information is given without warranty or guarantee, and it is expressly understood and agreed that you assume, and hereby expressly release us from, all liability, in tort, contract or otherwise, incurred in connection with the use of this guide.

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