Product Information
Methyltetrahydrophthalic Anhydride (MTHPA)

CAS number: 11070-44-3  
EINECS number: 234-290-7

Formula: C_{9}H_{10}O_{3}  
Structural formula:

\[
\begin{array}{c}
\text{CH}_3 \\
\text{C} \\
\text{O} \\
\text{O} \\
\text{CH}_3
\end{array}
\]

Molecular weight: 166.2

Synonyms
1,3-isobenzofurandione, tetrahydromethyl;  
1,2,3,6-Tetrahydromethylphthalic anhydride.

Applications
MTHPA is mainly used as a curing agent for epoxy resins. It has a low tendency to absorb moisture from the air and zero or minimal formation of carbon dioxide when mixed with tertiary amine accelerators.

MTHPA can be easily blended with various liquid resins providing stable, low viscous mixture and long pot lives. It is widely used for:

- Casting/Potting
- Impregnation
- Lamination

In the field of reinforced plastics it is used for filament wound products (pipes for oil, poles and sport goods), laminated sheets, printed circuit boards, switch gears.

Thanks to its excellent insulating properties, MTHPA found a lot of applications for the production of electrical parts such as: capacitors, resistors, wiring parts, transformers, ignition coils, fly back transformers

Product range
A range of product is available to satisfy all customer's needs. Please contact Lonza S.p.A. for more informations.

Specifications MTHPA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>clear liquid</td>
</tr>
<tr>
<td>Purity</td>
<td>99.0 % min</td>
</tr>
<tr>
<td>Colour</td>
<td>80 Hazen max</td>
</tr>
<tr>
<td>Acid content</td>
<td>0.5 % max</td>
</tr>
</tbody>
</table>

Typical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pour point</td>
<td>-40°C</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.197 g/ml</td>
</tr>
<tr>
<td>Viscosity, 25°C</td>
<td>58.0 mPa.s</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>2.0 mPa.s</td>
</tr>
<tr>
<td>Refractive index</td>
<td>1.495</td>
</tr>
</tbody>
</table>

Handling

Packaging: galvanized drum 220 kg

Storage: it must be stored away from open flames or other potential ignition source, and should be protected from moisture because, especially PI and 600 versions, easy crystallizes when it's in contact with the air moisture. In the winter season MTHPA can solidify, it can easily be remelted by simply heating.

Shelf life: 12 months from production date

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