Chemical Name: Molecular formula: C₈H₄O₃  
No.CAS: 85-44-9  
Abbreviation: PA

General Description:
Phthalic anhydride, the anhydride form of phthalic acid, is produced by the oxidation of orthoxylene and naphthalene. At room temperature it forms white crystals like flakes. In contact with water it results phthalic acid.

Phthalic anhydride is used to make simple esters widely used as plasticizers.

Technical Quality Conditions:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Unit</th>
<th>Values</th>
<th>Test methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>-</td>
<td>white flakes</td>
<td>visual</td>
</tr>
<tr>
<td>Phthalic anhydride content, min.</td>
<td>%</td>
<td>99.7</td>
<td>ILL-003/1-04-14</td>
</tr>
<tr>
<td>Maleic anhydride content, max</td>
<td>%</td>
<td>0.05</td>
<td>ILL-003/1-04-14</td>
</tr>
<tr>
<td>Molten color (Hazen), max</td>
<td>Hazen units</td>
<td>20</td>
<td>ASTM D 3366</td>
</tr>
<tr>
<td>Color stability at heating (90 minutes at 250°C), max</td>
<td>Hazen units</td>
<td>60</td>
<td>ASTM D 3366</td>
</tr>
<tr>
<td>Melting point, min</td>
<td>°C</td>
<td>130.9</td>
<td>ILL-003/1-04-10</td>
</tr>
<tr>
<td>Calcination residue, max</td>
<td>%</td>
<td>0.01</td>
<td>STAS 8358</td>
</tr>
</tbody>
</table>

Specific Properties:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignition temperature, °C</td>
<td>152</td>
</tr>
<tr>
<td>Flammability</td>
<td>inflammable</td>
</tr>
</tbody>
</table>

The specific properties present approximate values and contain general information, without being part of the technical quality conditions.

Main Applications:
- plasticizers;
- unsaturated polyester resins;
- alkyd resins;
- polyester polyols;
- dyes and pigments;
- halogenated anhydrides;
- pharmaceutical industry.
Shipping Information:

- palletized 25 kg bags or railway covered silos.

Storage:

Phthalic anhydride should be stored in a cool, dry, well-ventilated area out of direct sunlight and away from heat and ignition sources. Protect from accidental contact with water. The product should be stored in containers provided with fire resistant materials. Store away from strong oxidizers, strong acids and bases, ammonia, amines, rubber. Keep containers tightly closed and labeled.

Safety Considerations:

Please refer to the product Material Safety Data Sheet (MSDS) offering customers help to better satisfy their particular handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations.

Warning:

Phthalic anhydride is a corrosive product. It causes burns to any area of contact.

Phthalic anhydride may form combustible dust concentrations in the air. The product may cause allergic skin or respiratory reaction.

Keep out of the reach of children.

Attention:

Information contained in this document is provided to the best of our knowledge and experience. Please contact OLTCHIM to see if the document has been revised.

Important:

For a better suitability of the product for your particular purpose, tests are recommended prior product use. You are advised to make your own determination as to safety, appropriate manner of handling, storage, use and disposal. All the information contained in this product technical sheet is offered for your consideration, investigation and verification. The data is presented in good faith and is believed to be reliable. You should not consider the descriptions, information, data or design as a part of our terms and conditions of sale. We expressly disclaim responsibility or liability for any loss, damage or expense arising out of non-compliance with the information provided herein.