Technical Data Sheet

Diethylenetriaminepentaacetic acid

Product Information

Chemical Name: Diethylenetriaminepentaacetic acid
CAS #: 67-43-6
EINECS: 200-652-8
Synonyms: DPTA;(Carboxymethylimino)bis(ethylenenitrilo)tetraacetic acid; Pentetic acid
Molecular Formula: C14H23N3O10
Molecular Weight: 393.35

Description

White crystal or crystalline powder.
Soluble in hot water and alkali solution, slightly soluble in cold water, not soluble in alcohol ether and other organic solvents.

Physical Properties

Density: 1.56g/cm3
Melting point: 219-220°C
Boiling Point: 721.1°C at 760 mmHg
Flashing Point: 200°C
Water solubility: 5 g/L (20°C)
### Specification

<table>
<thead>
<tr>
<th>Items</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White crystal powder</td>
</tr>
<tr>
<td>Assay</td>
<td>≥99.00%</td>
</tr>
<tr>
<td>PH=11 mgcaco3/g</td>
<td>≥252</td>
</tr>
<tr>
<td>Heavy Metal (Pb)</td>
<td>≤0.001%</td>
</tr>
<tr>
<td>Fe</td>
<td>≤0.001%</td>
</tr>
<tr>
<td>Cl</td>
<td>≤0.01%</td>
</tr>
<tr>
<td>SO4</td>
<td>≤0.50%</td>
</tr>
<tr>
<td>Loss on drying</td>
<td>≤0.20%</td>
</tr>
<tr>
<td>PH(1% water solution 25°C)</td>
<td>2.10 ~ 2.50</td>
</tr>
</tbody>
</table>

### Safety

Diethylenetriaminepentaacetic acid is a stable material, not dangerous on transportation.

Always refer to the Material Safety Data Sheet (MSDS)

### Applications

1) DTPA is mainly used for sequestering metal ions that otherwise decompose hydrogen peroxide, which is used to bleach pulp in paper making.
2) DTPA is used for the chelating titrant.
3) DTPA is used for aldehyde, ketone, chloride of reductant plastic foaming agent, etc.
4) DTPA is used as the complexing agent, treatment for radioactive isotopes and heavy metal poisoning.
5) DTPA is also used for color processing kit chemicals, acrylonitrile concentrate decoloring agent, etc.

### Packaging

25kg per kraft paper bag or as per customer’s requirements.

### Storage & Handling

DTPA should be stored in cool and dry place. Keep container tightly closed.

Please refer to the Materials Safety Data Sheet (MSDS) for the handling methods.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on handling and disposal.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchant ability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the
information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we has been advised of the possibility of such damages.

Hefei TNJ Chemical Industry Co., Ltd.

B911 Xincheng Business Center
Qianshan Road, Hefei
230022 Anhui
China

Tel: (0086) 551 65418678
Fax: (0086) 551 65418697
Email: info@tnjchem.com
Site: www.tnjchem.com