1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{14}\text{H}_{24}\text{N}_{2}\text{O}_{10} \cdot \frac{1}{2}\text{H}_{2}\text{O} \)

Batch Molecular Weight: 389.36

Physical Appearance: White solid

Solubility: 1M NaOH to 100 mM

Storage: Store at RT

2. ANALYTICAL DATA

\(^1\text{H NMR:}\) Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon (C)</td>
<td>43.19</td>
<td>43.1</td>
</tr>
<tr>
<td>Hydrogen (H)</td>
<td>6.47</td>
<td>6.39</td>
</tr>
<tr>
<td>Nitrogen (N)</td>
<td>7.19</td>
<td>7.34</td>
</tr>
</tbody>
</table>
**Product Information**

**Product Name:** EGTA  
**Catalog No.:** 2807  
**Batch No.:** 4  
**EC Number:** 200-651-2  
**CAS Number:** 67-42-5

**Description:**
Calcium chelator; protects against cell death caused by nitric oxide-induced calcium influx into nerve cells.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C_{14}H_{24}N_{2}O_{10}.\frac{1}{2}H_{2}O
- **Batch Molecular Weight:** 389.36
- **Physical Appearance:** White solid

**Batch Molecular Structure:**

![Batch Molecular Structure](image)

**Storage:** Store at RT

**Solubility & Usage Info:**
1M NaOH to 100 mM

Note on solubility: this product is insoluble in water at room temperature. However, it becomes much more soluble as the pH increases. This can be achieved by gradual addition of a concentrated solution of aqueous sodium hydroxide. The solubility at pH 9 is >100 mM.

**Stability and Solubility Advice:**
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**