1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** C₆H₁₁NO₄
- **Batch Molecular Weight:** 161.16
- **Physical Appearance:** White crystalline powder
- **Solubility:** 1eq. NaOH to 100 mM
- **Storage:** Store at RT
- **Batch Molecular Structure:**

(1:1 mixture of enantiomers)

2. ANALYTICAL DATA

- **TLC:** \( R_f = 0.24 \) (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])
- **Melting Point:** Between 167 - 169°C
- **HPLC:** Shows >99.5% purity
- **¹H 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</td>
<td>44.72</td>
<td>44.66</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>6.88</td>
<td>6.89</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>8.69</td>
<td>8.61</td>
</tr>
</tbody>
</table>
Product Name: (±)-threo-3-Methylglutamic acid
CAS Number: 63088-04-0
Catalog No.: 0811 Batch No.: 6

Description:
A potent blocker of glutamate transport; selective for EAAT2 and EAAT4 (IC₅₀ values are 90, 109, 1600 and 1080 μM for EAAT2, EAAT4, EAAT1 and EAAT3 respectively).

Physical and Chemical Properties:
Batch Molecular Formula: C₉H₁₁NO₄
Batch Molecular Weight: 161.16
Physical Appearance: White crystalline powder
Minimum Purity: >98%

Batch Molecular Structure:

\[
\text{H}_2\text{N} \quad \text{H} \quad \text{Me} \quad \text{H} \quad \text{Me} \quad \text{H} \\
\text{H} \quad \text{Co}_2\text{H} \quad \text{H} \quad \text{Co}_2\text{H}
\]
(1:1 mixture of enantiomers)

Storage: Store at RT

Solubility & Usage Info:
1eq. NaOH to 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: