1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** $\text{C}_{13}\text{H}_{13}\text{N}_{3}\text{OS}$
- **Batch Molecular Weight:** 259.33
- **Physical Appearance:** Yellow solid
- **Solubility:** DMSO to 30 mM, ethanol to 15 mM with gentle warming
- **Storage:** Store at RT
- **Batch Molecular Structure:**

![Molecular Structure Image]

2. ANALYTICAL DATA

- **HPLC:** Shows 99.4% purity
- $^1\text{H NMR:}$ 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</td>
<td>60.21</td>
<td>60.39</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>5.05</td>
<td>5.07</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>16.2</td>
<td>16.21</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
### Product Name: Necrostatin-1

<table>
<thead>
<tr>
<th>Catalog No.: 2324</th>
<th>Batch No.: 2</th>
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<tbody>
<tr>
<td>CAS Number: 4311-88-0</td>
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<tr>
<td>IUPAC Name: 5-(1H-Indol-3-ylmethyl)-3-methyl-2-thioxo-4-imidazolidinone</td>
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**Description:**
ATP-competitive, allosteric inhibitor of receptor-interacting protein kinase 1 (RIPK1) (EC<sub>50</sub> = 182 nM). Blocks non-apoptotic cell death via inhibition of a specific cellular pathway, necroptosis, which leads to necrosis (EC<sub>50</sub> = 494 nM). Reduces ischemic brain injury in a mouse model of stroke.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C<sub>13</sub>H<sub>18</sub>N<sub>3</sub>OS
- **Batch Molecular Weight:** 259.33
- **Physical Appearance:** Yellow solid
- **Minimum Purity:** >99%

**Storage:** Store at RT

**Solubility & Usage Info:**
- DMSO to 30 mM
- Ethanol to 15 mM with gentle warming

**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:**