Product Name: Azathioprine

CAS Number: 446-86-6
IUPAC Name: 6-[(1-Methyl-4-nitro-1H-imidazol-5-yl)thio]-9H-purine

Catalog No.: 4099
Batch No.: 1
EC Number: 207-175-4

1. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch Molecular Formula</td>
<td>C$_9$H$_7$N$_7$O$_2$S</td>
</tr>
<tr>
<td>Batch Molecular Weight</td>
<td>277.26</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>Yellow solid</td>
</tr>
<tr>
<td>Solubility</td>
<td>DMSO to 100 mM</td>
</tr>
<tr>
<td>Storage</td>
<td>Store at -20°C</td>
</tr>
<tr>
<td>Batch Molecular Structure</td>
<td>![Molecular Structure Image]</td>
</tr>
</tbody>
</table>

2. ANALYTICAL DATA

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPLC</td>
<td>Shows 100% purity</td>
</tr>
<tr>
<td>$^1$H NMR</td>
<td>Consistent with structure</td>
</tr>
<tr>
<td>Mass Spectrum</td>
<td>Consistent with structure</td>
</tr>
<tr>
<td>Microanalysis</td>
<td>Carbon: 38.99, Hydrogen: 2.54, Nitrogen: 35.36</td>
</tr>
<tr>
<td></td>
<td>Theoretical:</td>
</tr>
<tr>
<td></td>
<td>Found:</td>
</tr>
<tr>
<td></td>
<td>Theoretical:</td>
</tr>
<tr>
<td></td>
<td>Found:</td>
</tr>
<tr>
<td>Theoretical: 38.99</td>
<td>39.19</td>
</tr>
<tr>
<td>Hydrogen: 2.54</td>
<td>2.56</td>
</tr>
<tr>
<td>Nitrogen: 35.36</td>
<td>35.52</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
# Product Information

**Product Name:** Azathioprine  
**Catalog No.:** 4099  
**Batch No.:** 1  
**CAS Number:** 446-86-6  
**EC Number:** 207-175-4  
**IUPAC Name:** 6-[(1-Methyl-4-nitro-1H-imidazol-5-yl)thio]-9H-purine

### Description:


### Physical and Chemical Properties:

- **Batch Molecular Formula:** C\(_9\)H\(_9\)N\(_5\)O\(_3\)S
- **Batch Molecular Weight:** 277.26
- **Physical Appearance:** Yellow solid
- **Minimum Purity:** >99%
- **Storage:** Store at -20°C

### References:


### Storage:

**Solubility & Usage Info:**

- DMSO 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.

---

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

<table>
<thead>
<tr>
<th>bio-techne.com</th>
<th>North America</th>
<th>China</th>
<th>Europe Middle East Africa</th>
<th>Rest of World</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:info@bio-techne.com">info@bio-techne.com</a></td>
<td>Tel: (800) 343 7475</td>
<td><a href="mailto:info.cn@bio-techne.com">info.cn@bio-techne.com</a></td>
<td>Tel: +44 (0)1235 529449</td>
<td><a href="http://www.tocris.com/distributors">www.tocris.com/distributors</a></td>
</tr>
<tr>
<td><a href="mailto:techsupport@bio-techne.com">techsupport@bio-techne.com</a></td>
<td>Tel: +86 (21) 52380373</td>
<td>Tel: +86 (21) 52380373</td>
<td>Tel:+1 612 379 2956</td>
<td>Tel:+86 (21) 52380373</td>
</tr>
</tbody>
</table>