1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** C₁₆H₂₁NO₃.HBr
- **Batch Molecular Weight:** 356.26
- **Physical Appearance:** White solid
- **Solubility:** water to 100 mM, DMSO to 25 mM
- **Storage:** Desiccate at RT
- **Batch Molecular Structure:**

![Molecular Structure](image)

2. ANALYTICAL DATA

- **TLC:** \( R_f = 0.45 \) (Chloroform:Methanol [9:1])
- **HPLC:** Shows 98.1% purity
- **¹H NMR:** Consistent with structure
- **Mass Spectrum:** Consistent with structure
- **Optical Rotation:** \([\alpha]_D = +106.8\) (Concentration = 1, Solvent = Water)
- **Microanalysis:**

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>53.94</td>
<td>6.22</td>
<td>3.93</td>
</tr>
<tr>
<td>Found</td>
<td>53.96</td>
<td>6.29</td>
<td>3.91</td>
</tr>
</tbody>
</table>

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

**Product Name:** Dihydro-β-erythroidine hydrobromide
**Catalog No.:** 2349
**Batch No.:** 11

**CAS Number:** 29734-68-7
**IUPAC Name:** (2S,13bS)-2-Methoxy-2,3,5,6,8,9,10,13-octahydro-1H,12H-benzo[5]pyrano[3,4-g]indolizin-12-one hydrobromide

**Description:**
Competitive nicotinic acetylcholine receptor antagonist with moderate selectivity for the neuronal α4 receptor subunit (IC50 values are 0.19 and 0.37 μM for α4β4 and α4β2 receptors respectively). Antagonizes behavioral effects of nicotine in vivo.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C_{16}H_{23}NO_{3}.HBr
- **Batch Molecular Weight:** 356.26
- **Physical Appearance:** White solid
- **Minimum Purity:** ≥98%

**Batch Molecular Structure:**

![Molecular Structure](image)

**Storage:** Desiccate at RT

**Solubility & Usage Info:**
- water to 100 mM
- DMSO to 25 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:**