**Product Name:** Naloxone hydrochloride  
**Catalog No.:** 0599  
**Batch No.:** 10  
**CAS Number:** 357-08-4  
**EC Number:** 206-611-0  
**IUPAC Name:** (5α)-4,5-Epoxy-3,14-dihydro-17-(2-propenyl)morphinan-6-one hydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** C₁₉H₂₁NO₄.HCl.2H₂O
- **Batch Molecular Weight:** 399.87
- **Physical Appearance:** White solid
- **Solubility:** water to 100 mM  
- **Storage:** Store at RT
- **Batch Molecular Structure:**

![Molecular Structure](image)

### 2. ANALYTICAL DATA

- **HPLC:** Shows 99.5% purity
- **¹H NMR:** Consistent with structure
- **Mass Spectrum:** Consistent with structure
- **Microanalysis:**
  
<table>
<thead>
<tr>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
</tr>
</thead>
<tbody>
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<td>Theoretical</td>
<td>57.07</td>
<td>6.55</td>
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<tr>
<td>Found</td>
<td>57.09</td>
<td>6.52</td>
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Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
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Catalog No.: 0599
Batch No.: 10

CAS Number: 357-08-4
EC Number: 206-611-0
IUPAC Name: (5\(\alpha\))-4,5-Epoxy-3,14-dihydro-17-(2-propenyl)morphinan-6-one hydrochloride

Description:
Opioid antagonist.

Physical and Chemical Properties:
Batch Molecular Formula: C\(_{19}\)H\(_{21}\)NO\(_4\).HCl.2H\(_2\)O
Batch Molecular Weight: 399.87
Physical Appearance: White solid

Minimum Purity: >99%

Storage: Store at RT

Solubility & Usage Info:
water 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:
Merck Index 12 6449.