1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** C₈H₉NO₂
- **Batch Molecular Weight:** 151.16
- **Physical Appearance:** White solid
- **Solubility:** phosphate buffered saline to 50 mM with gentle warming, ethanol to 100 mM, DMSO to 100 mM
- **Storage:** Store at RT

2. ANALYTICAL DATA

- **TLC:** $R_f = 0.64$ (Dichloromethane:Methanol:Ammonia soln. [2:1:0.01])
- **Melting Point:** Between 172 - 175°C
- **HPLC:** Shows >99.5% purity
- **¹H NMR:** Consistent with structure
- **Microanalysis:**
  
<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Found</th>
</tr>
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<tbody>
<tr>
<td>Carbon</td>
<td>63.57</td>
<td>63.44</td>
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<tr>
<td>Hydrogen</td>
<td>6</td>
<td>6.08</td>
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<tr>
<td>Nitrogen</td>
<td>9.27</td>
<td>9.19</td>
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</tbody>
</table>
**Product Name:** Acetaminophen  
**CAS Number:** 103-90-2  
**IUPAC Name:** N-(4-Hydroxyphenyl)acetamide

<table>
<thead>
<tr>
<th>Property</th>
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<tr>
<td>Catalog No.:</td>
<td>1706</td>
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<td>EC Number:</td>
<td>203-157-5</td>
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<td>Batch No.:</td>
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</table>

**Description:**  
Cyclooxygenase inhibitor; may be selective for COX-3 (IC<sub>50</sub> values are 460, > 1000 and > 1000 μM for canine COX-3, and murine COX-1 and COX-2 respectively). Widely used analgesic and antipyretic agent.

**Physical and Chemical Properties:**  
Batch Molecular Formula: C<sub>8</sub>H<sub>9</sub>NO<sub>2</sub>  
Batch Molecular Weight: 151.16  
Physical Appearance: White solid  
Minimum Purity: >99%

**Storage:** Store at RT

**Solubility & Usage Info:**  
- Phosphate buffered saline to 50 mM with gentle warming  
- Ethanol to 100 mM  
- 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.

**References:**  