Product Name: Aspirin
CAS Number: 50-78-2
IUPAC Name: 2-Acetoxybenzoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

   Batch Molecular Formula: $\text{C}_9\text{H}_8\text{O}_4$
   Batch Molecular Weight: 180.16
   Physical Appearance: White solid
   Solubility: water to 10 mM
               DMSO to 100 mM
   Storage: Store at RT
   Batch Molecular Structure:

2. ANALYTICAL DATA

   HPLC: Shows 99.7% 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</td>
<td>60.18</td>
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<tr>
<td>Hydrogen</td>
<td>4.48</td>
<td>4.49</td>
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</tbody>
</table>
**Product Name:** Aspirin  
**Catalog No.:** 4092  
**Batch No.:** 1  
**CAS Number:** 50-78-2  
**IUPAC Name:** 2-Acetoxybenzoic acid

**Description:**
Inhibitor of cyclooxygenase (COX)-1. Blocks the production of prostaglandins and thromboxanes. Exhibits antiplatelet and antithrombotic activities. Displays anticancer effects in some solid tumors. One of the first described NSAID drugs.

**Physical and Chemical Properties:**
Batch Molecular Formula: C_9H_8O_4  
Batch Molecular Weight: 180.16  
Physical Appearance: White solid  
Minimum Purity: >99%

**Storage:** Store at RT

**Solubility & Usage Info:**
- water to 10 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:**