**Product Name:** Anandamide  
**Catalog No.:** 1339  
**Batch No.:** 17  
**CAS Number:** 94421-68-8  
**IUPAC Name:** \(N-(2\text{-Hydroxyethyl})-5Z,8Z,11Z,14Z\text{-eicosatetraenamide}\)

### 1. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch Molecular Formula</td>
<td>(C_{22}H_{37}NO_2)</td>
</tr>
<tr>
<td>Batch Molecular Weight</td>
<td>347.54</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>Clear oil</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in ethanol (supplied pre-dissolved in anhydrous ethanol, 5mg/ml)</td>
</tr>
<tr>
<td>Storage</td>
<td>Store at -20°C</td>
</tr>
</tbody>
</table>

### 2. ANALYTICAL DATA

<table>
<thead>
<tr>
<th>Method</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLC</td>
<td>(R_f = 0.41) (Ethyl acetate:Ethanol [1:1])</td>
</tr>
<tr>
<td>HPLC</td>
<td>Shows 100% purity</td>
</tr>
<tr>
<td>(^1\text{H NMR})</td>
<td>Consistent with structure</td>
</tr>
<tr>
<td>Mass Spectrum</td>
<td>Consistent with structure</td>
</tr>
</tbody>
</table>
**Product Information**

**Product Name:** Anandamide

**CAS Number:** 94421-68-8

**IUPAC Name:** \(N\)-(2-Hydroxyethyl)-5Z,8Z,11Z,14Z-eicosatetraenamide

**Description:**
Endogenous cannabinoid and TRPV1 receptor agonist (\(K_i\) values are 89 and 371 nM at \(CB_1\) and \(CB_2\) receptors respectively; \(EC_{50}\) values are 18, 31 and 27 nM at GPR55, \(CB_1\) and \(CB_2\) respectively; \(pK_i = 5.68\) for rTRPV1). Also blocks TNF-\(\alpha\)-induced NF-\(\kappa\)B activation via direct inhibition of IKK. Available in water soluble emulsion. Deuterated analog also available.

**Physical and Chemical Properties:**

**Batch Molecular Formula:** \(C_{22}H_{37}NO_2\)

**Batch Molecular Weight:** 347.54

**Physical Appearance:** Clear oil

**Storage:** Store at -20°C

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**
Soluble in ethanol (supplied pre-dissolved in anhydrous ethanol, 5mg/ml)
This product is supplied dissolved in anhydrous ethanol at a concentration of 5mg/ml

**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:**


