Product Name: Myricetin
CAS Number: 529-44-2
IUPAC Name: 3,5,7-Trihydroxy-2-(3,4,5-trihydroxyphenyl)-4H-1-benzopyran-4-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{15}\text{H}_{10}\text{O}_{8}\text{H}_{2}\text{O} \)
Batch Molecular Weight: 336.26
Physical Appearance: Yellow solid
Solubility: DMSO to 100 mM, ethanol to 50 mM
Storage: Store at -20°C

2. ANALYTICAL DATA

HPLC: Shows 97.7% 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>53.58</td>
<td>53.6</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>3.6</td>
<td>3.57</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Description:
Irreversible TrxR inhibitor (IC_{50} = 0.62 \mu M). Exhibits concentration-, time- and NADH-dependent TrxR inhibition. Results in the oxidation of Trx and reduced TrxR activity in vitro in addition to the accumulation of cells in sub-G_{1} phase. Reduces neoplastic transformation and induces cell death in cancer cell lines. Chemotherapeutic.

Physical and Chemical Properties:
Batch Molecular Formula: C_{19}H_{12}O_{8}.H_{2}O
Batch Molecular Weight: 336.26
Physical Appearance: Yellow solid

Minimum Purity: >97%

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:
DMSO to 100 mM
ethanol to 50 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: