

## Certificate of Analysis

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**Product Name:** Flunitrazepam

**Catalog No.:** 4047

**Batch No.:** 1

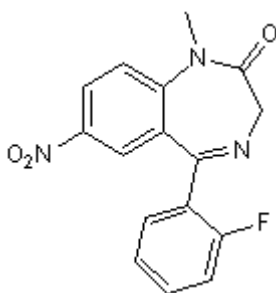
CAS Number: 1622-62-4

EC Number: 216-597-8

IUPAC Name: 5-(2-Fluorophenyl)-1,3-dihydro-1-methyl-7-nitro-2H-1,4-benzodiazepin-2-one

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>16</sub>H<sub>12</sub>FN<sub>3</sub>O<sub>3</sub>  
**Batch Molecular Weight:** 313.28  
**Physical Appearance:** White solid  
**Solubility:** ethanol to 10 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 99.9% purity

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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IUPAC Name: 5-(2-Fluorophenyl)-1,3-dihydro-1-methyl-7-nitro-2H-1,4-benzodiazepin-2-one

**Description:**

Ligand at the GABA<sub>A</sub> receptor benzodiazepine modulatory site. Exhibits hypnotic effects; also displays anxiolytic and sedative properties.

**Physical and Chemical Properties:**

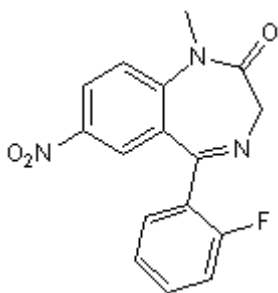
Batch Molecular Formula: C<sub>16</sub>H<sub>12</sub>FN<sub>3</sub>O<sub>3</sub>

Batch Molecular Weight: 313.28

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

ethanol to 10 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.

**Other Information:**

**INFORMATION FOR CUSTOMERS IN THE UK ONLY**

This product is a Schedule 3 Home Office controlled substance and customers in the UK are required to hold the relevant licence or be exempt from restrictions in order to purchase and possess this material.

**INFORMATION FOR CUSTOMERS IN THE USA ONLY**

This product is a Schedule IV DEA controlled substance and customers in the USA are required to hold a controlled substance registration in order to purchase and possess this material (in accordance with Title 21 code of federal regulations part 1300 to end).

**INFORMATION FOR CUSTOMERS IN CANADA ONLY**

This product is a Schedule I CDSA controlled substance and customers in Canada require an import permit to purchase this material.

**References:**

Merck Index **14** 4146.

**Johnston et al** (1998) Flunitrazepam rapidly reduces GABA<sub>A</sub> receptor subunit protein expression *via* a protein kinase C-dependent mechanism. *Br.J.Pharmacol.* **124** 1338. PMID: 9723942.

**Malanciuc et al** (2009) Analytical characterization of flunitrazepam. *Farmacia* **57** 167.

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