

## Certificate of Analysis

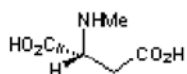
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**Product Name:** NMDA  
**CAS Number:** 6384-92-5  
**IUPAC Name:** N-Methyl-D-aspartic acid

**Catalog No.:** 0114      **Batch No.:** 29

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>5</sub>H<sub>9</sub>NO<sub>4</sub>·0.67H<sub>2</sub>O  
**Batch Molecular Weight:** 159.14  
**Physical Appearance:** White solid  
**Solubility:** water to 100 mM  
 phosphate buffered saline to 100 mM  
 1eq. NaOH to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**Melting Point:** Between 178 - 182°C(dec)  
**HPLC:** Shows 100% purity  
<sup>1</sup>H NMR: Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = -16 (Concentration = 1, Solvent = Water)  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	37.72	6.55	8.8
Found	37.85	6.16	8.8

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

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**Product Name:** NMDA

**Catalog No.:** 0114

**Batch No.:** 29

CAS Number: 6384-92-5

IUPAC Name: N-Methyl-D-aspartic acid

**Description:**

Prototypic NMDA receptor agonist. Caged version also available (Cat. No 2224).

**Physical and Chemical Properties:**

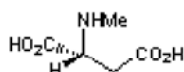
Batch Molecular Formula: C<sub>5</sub>H<sub>9</sub>NO<sub>4</sub>.0.67H<sub>2</sub>O

Batch Molecular Weight: 159.14

Physical Appearance: White solid

**Minimum Purity:** ≥99%

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

water to 100 mM

phosphate buffered saline to 100 mM

1eq. NaOH 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:**

**Watkins and Evans** (1981) Excitatory amino acid transmitters. Annu.Rev.Pharmacol.Toxicol. **21** 165. PMID: 6112965.

**Watkins** (1978) Excitatory amino acids. Kainic acid as a Tool in Neurobiology. Edited by E 37.

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