

**Product Name:** MPDC

**Catalog No.:** 0973

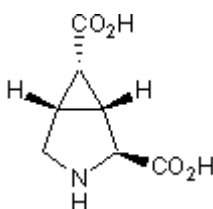
**Batch No.:** 6

CAS Number: 159262-32-5

IUPAC Name: L-*anti-endo*-3,4-Methanopyrrolidinedicarboxylic acid

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>7</sub>H<sub>9</sub>NO<sub>4</sub>  
**Batch Molecular Weight:** 171.15  
**Physical Appearance:** White solid  
**Solubility:** water to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.22 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])  
**Melting Point:** Between 256 - 257°C(dec)  
**<sup>1</sup>H NMR:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = -82 (Concentration = 1, Solvent = water)

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	49.12	5.3	8.18
Found	48.87	5.32	8.18

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**Description:**

Potent inhibitor of the Na<sup>+</sup>-dependent high-affinity synaptosomal glutamate transporter.

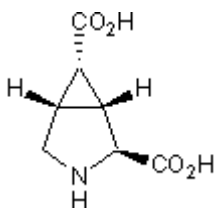
**Physical and Chemical Properties:**

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Batch Molecular Weight: 171.15

Physical Appearance: White solid

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

water 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:**

**Bridges et al** (1994) A conformationally constrained competitive inhibitor of the sodium-dependent glutamate transporter in forebrain synaptosomes: L-*anti-endo*-3,4-methanopyrrolidine carboxylate. *Neurosci.Lett.* **174** 193. PMID: 7970177.

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