

Certificate of Analysis

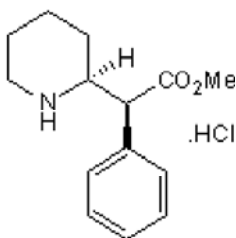
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Product Name: Threo-methylphenidate hydrochloride
CAS Number: 298-59-9
IUPAC Name: Threo-methyl α -Phenyl-2-piperidineacetate hydrochloride

Catalog No.: 1812 **Batch No.:** 2
EC Number: 206-065-3

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₄H₁₉NO₂.HCl
Batch Molecular Weight: 269.77
Physical Appearance: White solid
Solubility: water to 50 mM
 ethanol to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.1% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

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

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Catalog No.: 1812

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CAS Number: 298-59-9

EC Number: 206-065-3

IUPAC Name: Threo-methyl α -Phenyl-2-piperidineacetate hydrochloride

Description:

Psychomotor stimulant. Inhibitor of dopamine and noradrenalin transporters that increases the extracellular concentration of dopamine and noradrenalin. Increases locomotor activity in vivo.

Physical and Chemical Properties:

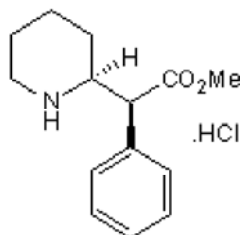
Batch Molecular Formula: C₁₄H₁₉NO₂.HCl

Batch Molecular Weight: 269.77

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

water to 50 mM

ethanol 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.

Other Information:

INFORMATION FOR CUSTOMERS IN THE UK ONLY

This product is a Schedule 2 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 II 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 III CDSA controlled substance and customers in Canada require an import permit to purchase this material.

References:

Askenasy et al (2007) Methylphenidate (Ritalin): behavioral studies in the rat. *Int.J.Neurosci.* **117** 757. PMID: 17454243.

Leonard et al (2004) Methylphenidate: a review of its neuropharmacological, neuropsychological and adverse clinical effects. *Human Psychopharm.* **19** 151.

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