

Certificate of Analysis

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Product Name: 1-Acetyl-4-methylpiperazine hydrochloride

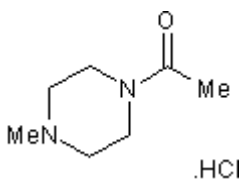
Catalog No.: 0351

Batch No.: 2

CAS Number: 144205-68-5

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₇H₁₄N₂O.HCl
Batch Molecular Weight: 178.66
Physical Appearance: White solid
Solubility: water to 50 mM
Storage: Desiccate at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.3 (Chloroform:Methanol:Ammonia soln. [50:50:1])
Melting Point: Between 219 - 222°C
¹H NMR: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen	Chlorine
Theoretical	47.06	8.46	15.68	19.84
Found	46.75	8.52	15.28	19.96

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

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Description:

Structural analog of acetylcholine that acts as a nAChR agonist.

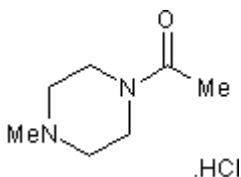
Physical and Chemical Properties:

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Storage: Desiccate at RT

Solubility & Usage Info:

water 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:

Garcha *et al* (1993) Behavioural and ligand binding studies in rats with 1-acetyl-4-methylpiperazine a novel nicotinic agonist. *Psychopharmacology* **110** 347. PMID: 7831430.

Warpman *et al* (1998) Regulation of nicotinic receptor subtypes following chronic nicotinic agonist exposure in M10 and SH-SY5Y neuroblastoma cells. *J.Neurochem.* **70** 2028. PMID: 9572289.

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