

# Certificate of Analysis

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**Product Name:** *m*-CPP hydrochloride

**Catalog No.:** 0875

**Batch No.:** 8

**CAS Number:** 13078-15-4

**EC Number:** 265-718-0

**IUPAC Name:** 1-(3-Chlorophenyl)piperazine hydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>10</sub>H<sub>13</sub>ClN<sub>2</sub>.HCl

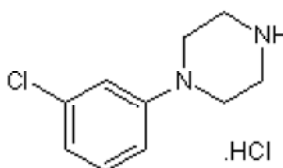
**Batch Molecular Weight:** 233.14

**Physical Appearance:** White solid

**Solubility:** water to 100 mM

**Storage:** Store at RT

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**Melting Point:** At 214°C

**HPLC:** Shows >99.9% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

Carbon Hydrogen Nitrogen

Theoretical	51.52	6.05	12.02
Found	51.64	5.88	12.03

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

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**Catalog No.:** 0875

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**Description:**

5-HT<sub>2C/2B</sub> receptor agonist/partial agonist; displays some activity at 5-HT<sub>2A</sub> and 5-HT<sub>1</sub> receptors. pEC<sub>50</sub> values are 7.09, 7.2, 6.65, 5.9 and 6.5 for human recombinant 5-HT<sub>2C</sub>, 2B and 2A, bovine 5-HT<sub>1A</sub> and rat 5-HT<sub>1B</sub> receptors respectively. Suppresses locomotor activity in rats in vivo.

**Physical and Chemical Properties:**

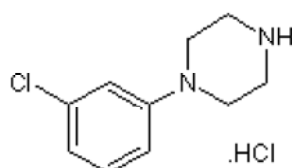
Batch Molecular Formula: C<sub>10</sub>H<sub>13</sub>ClN<sub>2</sub>.HCl

Batch Molecular Weight: 233.14

Physical Appearance: White solid

**Minimum Purity:** ≥99%

**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.

**Other Information:**

**INFORMATION FOR CUSTOMERS IN THE UK ONLY**

This product is a Schedule 4.1 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.

**References:**

**Porter et al** (1999) Functional characterization of agonists at recombinant human 5-HT<sub>2A</sub>, 5-HT<sub>2B</sub> and 5-HT<sub>2C</sub> receptors in CHO-K1 cells. Br.J.Pharmacol. **128** 13. PMID: 10498829.

**Hoyer et al** (1994) VII. International Union of Pharmacology classification of receptors for 5-hydroxytryptamine (serotonin). Pharmacol.Rev. **46** 157. PMID: 7938165.

**Curzon et al** (1990) m-CPP: a tool for studying behavioural responses associated with 5-HT<sub>1C</sub> receptors. TiPS **11** 181. PMID: 2188399.

**Lucki et al** (1989) Effect of 1-(m-Chlorophenyl)piperazine and 1-(m-trifluoromethylphenyl)piperazine on locomotor activity. J.Pharmacol.Exp.Ther. **249** 155. PMID: 2709329.

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