

## Certificate of Analysis

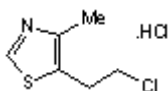
[www.tocris.com](http://www.tocris.com)

**Product Name:** Chlormethiazole hydrochloride  
**CAS Number:** 6001-74-7  
**IUPAC Name:** 5-(2-Chloroethyl)-4-methylthiazole hydrochloride

**Catalog No.:** 0881  
**Batch No.:** 2  
**EC Number:** 208-565-7

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>6</sub>H<sub>8</sub>ClNS.HCl  
**Batch Molecular Weight:** 198.11  
**Physical Appearance:** White crystalline solid  
**Solubility:** water to 100 mM  
**Storage:** Desiccate at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.59 (Dichloromethane:Ethyl acetate [6:4])  
**Melting Point:** Between 129 - 131 °C  
**HPLC:** Shows >99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	36.38	4.58	7.07
Found	36.33	4.48	7.11

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

## Product Information

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**Catalog No.:** 0881  
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**Description:**

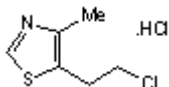
Sedative and anticonvulsant which is neuroprotective in a number of animal models. Prevents the degeneration of serotonergic nerve terminals induced by MDMA ('Ecstasy').

**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>6</sub>H<sub>8</sub>CINS.HCl  
 Batch Molecular Weight: 198.11  
 Physical Appearance: White crystalline solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Desiccate at RT

**Solubility & Usage Info:**

water to 100 mM  
**CAUTION** - This product is hygroscopic and we recommend that it is desiccated upon arrival. Solutions should be made up as soon as the vial is opened.

**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:**

**Hewitt and Green** (1994) Chloromethiazole, dizocilpine and haloperidol prevent the degeneration of serotonergic nerve terminals induced by the administration of MDMA ('Ecstasy') to rats. *Neuropharmacology* **33** 1589. PMID: 7539115.

**Cross et al** (1995) The protective action of chloromethiazole against ischaemia induced neurodegeneration in gerbils when infused at doses having little sedative or anticonvulsant activity. *Br.J.Pharmacol.* **114** 1625. PMID: 7599932.

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