

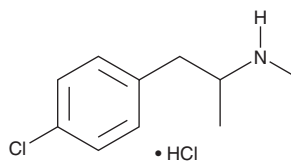
# PRODUCT INFORMATION



## 4-Chloromethamphetamine (hydrochloride)

Item No. 9002185

**CAS Registry No.:** 30572-91-9  
**Formal Name:** 4-chloro-N,α-dimethyl-  
benzeneethanamine, monohydrochloride  
**Synonyms:** 4-CMA, *p*-CMA, *para*-CMA, Ro 4-6861  
**MF:** C<sub>10</sub>H<sub>14</sub>ClN • HCl  
**FW:** 220.1  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 221 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥5 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Description

Methamphetamine (Item No. 13997) is a regulated psychoactive compound that is both neurotoxic and prone to addiction.<sup>1-3</sup> 4-Chloromethamphetamine is a halogenated analog of methamphetamine. *In vivo*, it is converted to 4-chloroamphetamine (4-CA; Item No. 9001856), which causes rapid depletion of neurological serotonin within hours after injection.<sup>4,5</sup> 4-CA is highly and selectively neurotoxic, targeting serotonergic neurons.<sup>4,5</sup> This product is intended for forensic and research applications.

### References

1. Rothman, R.B., Baumann, M.H., Dersch, C.M., *et al.* Amphetamine-type central nervous system stimulants release norepinephrine more potently than they release dopamine and serotonin. *Science* **39(1)**, 32-41 (2001).
2. Rothman, R.B., Vu, N., Partilla, J.S., *et al.* *In vitro* characterization of ephedrine-related stereoisomers at biogenic amine transporters and the receptorome reveals selective actions as norepinephrine transporter substrates. *J. Pharmacol. Exp. Ther.* **307(1)**, 138-145 (2003).
3. Jirovsk , D., Lemr, K., Sev  k, J., *et al.* Methamphetamine - properties and analytical methods of enantiomer determination. *Forensic Sci. Int.* **96(1)**, 61-70 (1998).
4. Fuller, R.W., Baker, J.C., Perry, K.W., *et al.* Comparison of 4-chloro-, 4-bromo- and 4-fluoroamphetamine in rats: Drug levels in brain and effects on brain serotonin metabolism. *Neuropharmacology* **14(10)**, 739-746 (1975).
5. Harvey, J.A., McMaster, S.E., and Fuller, R.W. Comparison between the neurotoxic and serotonin-depleting effects of various halogenated derivatives of amphetamine in the rat. *J. Pharmacol. Exp. Ther.* **202(3)**, 581-589 (1977).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 • USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
[WWW.CAYMANCHEM.COM](http://WWW.CAYMANCHEM.COM)