

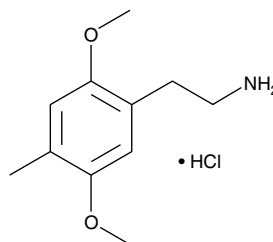
Product Information



2C-D (hydrochloride) (exempt preparation)

Item No. 15721

CAS Registry No.: 25505-65-1
Formal Name: 2,5-dimethoxy-4-methylbenzeneethanamine, monohydrochloride
Synonym: 2,5-Dimethoxy-4-methylphenethylamine
MF: C₁₁H₁₇NO₂ • HCl
FW: 231.7
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A solution in methanol
UV/Vis.: λ_{max}: 227, 292 nm



Laboratory Procedures

For long term storage, we suggest that 2C-D (hydrochloride) (exempt preparation) be stored as supplied at -20°C. It should be stable for at least two years.

2C-D (hydrochloride) (exempt preparation) is supplied as a solution in methanol. To change the solvent, simply evaporate the methanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of 2C-D (hydrochloride) (exempt preparation) in ethanol and DMSO is approximately 14 mg/ml and approximately 5 mg/ml in DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of 2C-D (hydrochloride) (exempt preparation) is needed, it can be prepared by evaporating the methanol and directly dissolving the neat oil in aqueous buffers. The solubility of 2C-D (hydrochloride) (exempt preparation) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

A series of 2,5-dimethoxyphenethylamines, collectively referred to as 2Cs, have psychoactive effects.^{1,2} The most effective 2C compounds are substituted at the four position of the aromatic ring. Many are scheduled as illegal substances.^{3,4} 2C-D is described formally as 2,5-dimethoxy-4-methylphenethylamine. It is a weak agonist of serotonin (5-HT; Item No. 14332) receptors (pEC₅₀s = 5.09 and 4.73 for 5-HT_{2A} and 5-HT_{2C}, respectively).² Its metabolism in rats has been described.⁴ LC-MS/MS screening methods for this designer drug have been developed.⁵ This product is intended for forensic and research purposes.

References

1. Bruno, R., Matthews, A.J., Dunn, M., *et al.* Emerging psychoactive substance use among regular ecstasy users in Australia. *Drug Alcohol Depend.* **124**(1-2), 19-25 (2012).
2. Moya, P.R., Berg, K.A., Gutiérrez-Hernandez, M.A., *et al.* Functional selectivity of hallucinogenic phenethylamine and phenylisopropylamine derivatives at human 5-hydroxytryptamine (5-HT)_{2A} and 5-HT_{2C} receptors. *J. Pharmacol. Exp. Ther.* **321**, 1054-1061 (2007).
3. Meyer, M.R. and Maurer, H.H. Metabolism of designer drugs of abuse: An updated review. *Curr. Drug Metab.* **11**, 468-482 (2010).
4. Nagai, F., Nonaka, R., and Satoh Hisashi Kamimura, K. The effects of non-medically used psychoactive drugs on monoamine neurotransmission in rat brain. *Eur. J. Pharmacol.* **559**(2-3), 132-137 (2007).
5. Wohlfarth, A., Weinmann, W., and Dresen, S. LC-MS/MS screening method for designer amphetamines, tryptamines, and piperazines in serum. *Anal. Bioanal. Chem.* **396**, 2403-2414 (2010).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/15721

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. 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

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery.**

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy located on our website and in our catalog.**

Copyright Cayman Chemical Company, 04/10/2014

Cayman Chemical

Mailing address
1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone
(800) 364-9897
(734) 971-3335

Fax
(734) 971-3640

E-Mail
custserv@caymanchem.com

Web
www.caymanchem.com