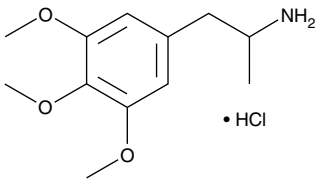
Product Information

3,4,5-Trimethoxyamphetamine (hydrochloride) (exempt preparation)

Item No. 15682

CAS Registry No.: 5688-80-2
Formal Name: 3,4,5-trimethoxy-α-methyl-benzeneethanamine, monohydrochloride
Synonyms: Mescalamphetamine, NSC 167759, TMA
MF: $C_{12}H_{19}NO_3$ • HCl
FW: 261.7
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A solution in methanol



Laboratory Procedures

For long term storage, we suggest that 3,4,5-trimethoxyamphetamine (TMA) (hydrochloride) (exempt preparation) be stored as supplied at -20°C. It should be stable for at least two years.

TMA (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 purged with an inert gas can be used. The solubility of TMA (hydrochloride) (exempt preparation) in these solvents is approximately 14, 5, and 13 mg/ml, respectively.

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 TMA (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 TMA (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.

TMA is a psychedelic hallucinogen that has appeared on the illicit drug market.[1] Unlike amphetamines and cathinones, TMA has no effect on monoamine re-uptake.[2] TMA has modest effects on the 5-HT_2 serotonin receptors (pEC_{50}s = 5.15 and 5.31 for phosphatidyl inositol release through 5-HT_{2A} and $5HT_{2C}$, respectively).[3] This product is intended for research and forensic applications.

References

1. 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).
2. 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).
3. 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).

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