Product Information

DL-Cathinone (hydrochloride) (exempt preparation)

Item No. 15654

CAS Registry No.: 16735-19-6

Formal Name: 2-amino-1-phenyl-1-propanone,

monohydrochloride

Synonyms: α-Aminopropiophenone, NSC 166465

MF: C₀H₁₁NO • HCl

FW: 185.7 **Purity:** ≥98%

Stability: ≥2 years at -20°C Supplied as: A solution in methanol

UV/Vis.: λ_{max} : 247 nm

HCI

Laboratory Procedures

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

DL-Cathinone (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 DL-cathinone (hydrochloride) (exempt preparation) in ethanol and DMSO is approximately 30 mg/ml and approximately 20 mg/ml

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 DL-cathinone (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 DL-cathinone (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.

Cathinone, the main psychoactive alkaloid from the khat plant (C. edulis), is a potent central stimulant and a naturally occurring analog of amphetamine. DL-Cathinone is a racemic mixture of (-)-(S)-cathinone (Item No. 13869) and its less potent (+)-isomer. Like amphetamine, DL-cathinone and (-)-(S)-cathinone are potent releasers of norepinephrine and dopamine. $^{2-4}$ With an ED $_{50}$ value of 0.24 mg/kg, DL-cathinone produces amphetamine-like effects on the operant behavior of rats trained to discriminate 0.2-0.8 mg/kg of (D)-amphetamine.⁴ This product is intended for research and forensic applications.

References

- 1. Dal Cason, T.A., Young, R., and Glennon, R.A. Cathinone: An investigation of several N-alkyl and methylenedioxysubstituted analogs. Pharmacol. Biochem. Behav. 58(4), 1109-1116 (1997).
- Kalix, P. and Glennon, R.A. Further evidence for an amphetamine-like mechanism of action of the alkaloid cathinone. Biochem. Pharmacol. 35(18), 3015-3019 (1986).
- Glennon, R.A. and Liebowitz, S.M. Serotonin receptor affinity of cathinone and related analogues. J. Med. Chem. 25, 393-397 (1982).
- Schechter, M.D., Rosecrans, J.A., and Glennon, R.A. Comparison of behavioral effects of cathinone, amphetamine and apomorphine. Pharmacol. Biochem. Behav. 20(2), 181-184 (1984).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/15654

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

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.

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