Pyrovalerone (hydrochloride)
Item No. 10836

CAS Registry No.: 1147-62-2
Formal Name: 1-(4-methylphenyl)-2-(1-pyrrolidinyl)-1-pentanone, monohydrochloride
Synonyms: Centroton, Thymergix, Valerophenone

MF: C16H23NO • HCl
FW: 281.8
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: λ_max: 255 nm

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

Pyrovalerone (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the pyrovalerone (hydrochloride) in the solvent of choice. Pyrovalerone (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of pyrovalerone (hydrochloride) in ethanol, DMSO, and DMF is approximately 1, 0.1, 0.25 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. Organic solvent-free aqueous solutions of pyrovalerone (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of pyrovalerone (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Pyrovalerone is an inhibitor of the transporters for certain monoamine neurotransmitters, including dopamine and norepinephrine, preventing their uptake. It has been used clinically for the treatment of chronic fatigue, but is used infrequently due to problems with abuse and dependence. Pyrovalerone is a DEA Schedule V controlled substance.

Pyrovalerone is for use in the forensic analysis of samples that may contain this compound. This product, the hydrochloride salt of pyrovalerone, has superior solubility in aqueous solvents, compared to the free base (Item No. 10817).

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/10836

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

MATERIAL 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 Material 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 herein 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.

The 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 such 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, 02/14/2012