

# PRODUCT INFORMATION



## 3,4-Methylenedioxy- $\alpha$ -Pyrrolidinopropiophenone (hydrochloride)

Item No. 10439

CAS Registry No.: 24698-57-5  
Formal Name: 1-(1,3-benzodioxol-5-yl)-2-(1-pyrrolidinyl)-1-propanone, monohydrochloride

Synonyms: 3,4-MD- $\alpha$ -PPP, 3,4-MDPPP

MF: C<sub>14</sub>H<sub>17</sub>NO<sub>3</sub> • HCl

FW: 283.8

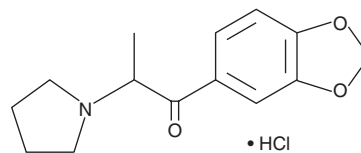
Purity:  $\geq 97\%$

UV/Vis.:  $\lambda_{\max}$ : 235, 282, 319 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



### Laboratory Procedures

3,4-Methylenedioxy- $\alpha$ -pyrrolidinopropiophenone (hydrochloride) (3,4-MD- $\alpha$ -PPP (hydrochloride)) is supplied as a crystalline solid. A stock solution may be made by dissolving the MDPPP (hydrochloride) in the solvent of choice. 3,4-MD- $\alpha$ -PPP (hydrochloride) is soluble in organic solvents such as ethanol and DMSO which should be purged with an inert gas. The solubility of 3,4-MD- $\alpha$ -PPP (hydrochloride) in ethanol is approximately 1 mg/ml and approximately 0.5 mg/ml in DMSO.

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 3,4-MD- $\alpha$ -PPP (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 3,4-MD- $\alpha$ -PPP (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

PPPs are a family of compounds that feature a pyrrolidinyl group affixed to the narcotic cathinone. Many have been identified as components of designer drugs.<sup>1</sup> 3,4-MD- $\alpha$ -PPP (hydrochloride) shares structural features of the stimulants  $\alpha$ -PPP (Item No. 10445) and methylenedioxypyrovalerone (Item No. 10684). The metabolism of 3,4-MD- $\alpha$ -PPP in male Wistar rats has been characterized.<sup>2,3</sup> This product is intended to be used for forensic applications.

### References

1. Kikura-Hanajiri, R., Uchiyama, N., and Goda, Y. Survey of current trends in the abuse of psychotropic substances and plants in Japan. *Leg. Med. (Tokyo)* **13(3)**, 109-15 (2011).
2. Springer, D., Staack, R.F., Paul, L.D., *et al.* Identification of cytochrome P450 enzymes involved in the metabolism of 3',4'-methylenedioxy- $\alpha$ -pyrrolidinopropiophenone (MDPPP), a designer drug, in human liver microsomes. *Xenobiotica* **35(3)**, 227-237 (2005).
3. Staack, R.F. and Maurer, H.H. Metabolism of designer drugs of abuse. *Curr. Drug Metab.* **6(3)**, 259-274 (2005).

#### 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.

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