

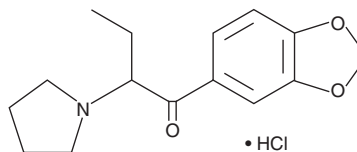
# PRODUCT INFORMATION



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

Item No. 10437

**CAS Registry No.:** 24622-60-4  
**Formal Name:** 1-(1,3-benzodioxol-5-yl)-2-(1-pyrrolidinyl)-1-butanone, monohydrochloride  
**Synonym:** 3,4-MDPBP  
**MF:** C<sub>15</sub>H<sub>19</sub>NO<sub>3</sub> • HCl  
**FW:** 297.8  
**Purity:** ≥97%  
**UV/Vis.:**  $\lambda_{\max}$ : 236, 282, 321 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥5 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

3,4-MDPBP (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the 3,4-MDPBP (hydrochloride) in the solvent of choice, which should be purged with an inert gas. 3,4-MDPBP (hydrochloride) is soluble in organic solvents such as ethanol and DMSO. The solubility of 3,4-MDPBP (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-MDPBP (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 3,4-MDPBP (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

Pyrrolidinophenones (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-MDPBP (hydrochloride) shares structural features of the stimulants  $\alpha$ -PPP (Item No. 10445) and methylenedioxypropylone (Item No. 10684). This product is intended to be used for forensic applications.

### Reference

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).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 07/18/2023

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM