# PRODUCT INFORMATION



# 4-fluoro BZP (hydrochloride)

Item No. 11112

CAS Registry No.: 199672-06-5

Formal Name: 1-[(4-fluorophenyl)methyl]-

piperazine, dihydrochloride

Synonyms: 1-(4-Fluorobenzyl)piperazine,

1-(para-Fluorobenzyl)piperazine, 1-(p-Fluorobenzyl)piperazine, p-fluoro BZP, para-fluoro BZP

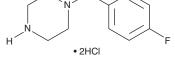
 $C_{11}H_{15}FN_2 \bullet 2HCI$ MF:

FW: 267.2 **Purity:** ≥98%

A crystalline solid Supplied as:

-20°C Storage: Stability: ≥5 years

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



# Description

Benzylpiperazines (BZP) are stimulant drugs which inhibit monoamine uptake. 1,2 BZP and substituted derivatives, such as 1-(3,4-methylenedioxybenzyl) piperazine, have been identified as designer drugs or drugs of abuse.<sup>3,4</sup> 4-fluoro BZP is a substituted BZP with a potential for abuse. The physiological and toxicological properties of this compound have not been evaluated. This product is intended for forensic and research applications. 4-fluoro BZP is also used as a precursor in the synthesis of certain bioactive compounds.5

## References

- 1. Baumann, M.H., Clark, R.D., Budzynski, A.G., et al. N-substituted piperazines abused by humans mimic the molecular mechanism of 3,4-methylenedioxymethamphetamine (MDMA, or 'Ecstasy'). Neuropsychopharmacology 30(3), 550-560 (2005).
- 2. Hill, S.L. and Thomas, S.H. Clinical toxicology of newer recreational drugs. Clin. Toxicol. (Phila) 49(8), 705-719 (2011).
- 3. 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).
- 4. Arbo, M.D., Bastos, M.L., and Carmo, H.F. Piperazine compounds as drugs of abuse. Drug Alcohol Depend. 122(3), 174-185 (2011).
- 5. Mohamed, T., Zhao, X., Habib, L.K., et al. Design, synthesis and structure-activity relationship (SAR) studies of 2,4-disubstituted pyrimidine derivatives: Dual activity as cholinesterase and Aβ-aggregation inhibitors. Bioorg. Med. Chem. 19(7), 2269-2281 (2011).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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

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, 07/07/2023

# **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