

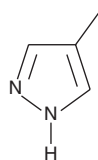
PRODUCT INFORMATION



Fomepizole

Item No. 17851

CAS Registry No.: 7554-65-6
Formal Name: 4-methyl-1H-pyrazole
Synonym: 4-Methylpyrazole
MF: C₄H₆N₂
FW: 82.1
Purity: ≥98%
UV/Vis.: λ_{max}: 220 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Fomepizole is supplied as a neat oil. A stock solution may be made by dissolving the fomepizole the solvent of choice. Fomepizole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of fomepizole in these solvents is approximately 50 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. Organic solvent-free aqueous solutions of fomepizole can be prepared by directly dissolving the neat oil in aqueous buffers. The solubility of fomepizole in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Fomepizole is a competitive inhibitor of alcohol dehydrogenase, the enzyme that catalyzes metabolism of ethylene glycol and methanol to toxic metabolites.¹ At 10 μM in monkeys, it can prevent the formation of toxic alcohol metabolites that generate metabolic acidosis.¹ This compound is typically used as an antidote for ethylene glycol or methanol poisoning.²

References

1. Blomstrand, R., Östling-Wintzell, H., Löf, A., *et al.* Pyrazoles as inhibitors of alcohol oxidation and as important tools in alcohol research: An approach to therapy against methanol poisoning. *Proc. Natl. Acad. Sci. USA* **76(7)**, 3499-3503 (1979).
2. Brent, J., McMartin, K., Phillips, S., *et al.* Fomepizole for the treatment of methanol poisoning. *N. Engl. J. Med.* **344**, 424-429 (2001).

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, 01/05/2023

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