

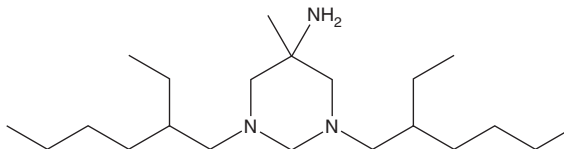
PRODUCT INFORMATION



Hexetidine

Item No. 38755

CAS Registry No.: 141-94-6
Formal Name: 1,3-bis(2-ethylhexyl)hexahydro-5-methyl-5-pyrimidinamine
Synonym: NSC 17764
MF: C₂₁H₄₅N₃
FW: 339.6
Purity: ≥95%
Supplied as: A neat liquid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Hexetidine is supplied as a neat liquid. A stock solution may be made by dissolving the hexetidine in the solvent of choice, which should be purged with an inert gas. Hexetidine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of hexetidine in these solvents is approximately 30 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 hexetidine can be prepared by directly dissolving the neat liquid in aqueous buffers. The solubility of hexetidine in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Hexetidine is an antibacterial and antifungal agent.¹ It is active against the bacteria *S. mutans*, *S. sanguis*, *E. coli*, and Oxford *staphylococcus* (MIC₅₀s = 11.1, 11.1, 111, and 12.5 µg/ml) and the fungus *C. albicans* (MIC₅₀ = 16.7 µg/ml). Topical administration of hexetidine (0.2% w/v) slows plaque formation in a rat incisor plaque model.²

References

1. Roberts, W.R. and Addy, M. Comparison of the *in vivo* and *in vitro* antibacterial properties of antiseptic mouthrinses containing chlorhexidine, alexidine, cetyl pyridinium chloride and hexetidine. Relevance to mode of action. *J. Clin. Periodontol.* **8(4)**, 295-310 (1981).
2. Schemehorn, B.R., McDonald, J.L., Stookey, G.K., *et al.* An incisor plaque model in rats. *J. Dent. Res.* **63(1)**, 32-36 (1984).

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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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