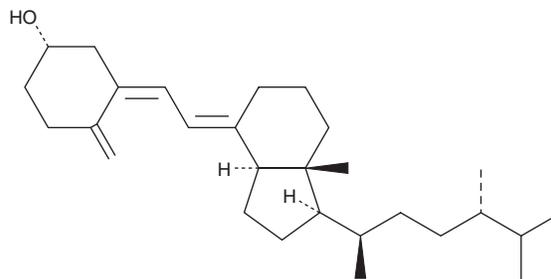


PRODUCT INFORMATION



Vitamin D₄ Item No. 22471

CAS Registry No.: 511-28-4
Formal Name: (1S,3Z)-4-methylene-3-[(2E)-2-[(1R,3aS,7aR)-octahydro-7a-methyl-1-[(1R,4S)-1,4,5-trimethylhexyl]-4H-inden-4-ylidene]ethylidene]-cyclohexanol
Synonym: 22,23-Dihydroergocalciferol
MF: C₂₈H₄₆O
FW: 398.7
Purity: ≥98%
UV/Vis.: λ_{max}: 212, 265 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

Vitamin D₄ is supplied as a crystalline solid. A stock solution may be made by dissolving the vitamin D₄ in the solvent of choice, which should be purged with an inert gas. Vitamin D₄ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of vitamin D₄ in these solvents is approximately 30, 3, and 25 mg/ml, respectively.

Description

Vitamin D₄ is a vitamin produced in fungi from the UV irradiation of 22,23-dihydroergosterol (Provitamin D₄).¹ It is produced by several mushroom species including *A. bisporus*, *F. velutipes*, *G. frondose*, and *C. cibarius* and in *S. cerevisiae*. Vitamin D₄ is 60% as active as vitamin D₃ (Item No. 11792) at healing rickets in rats.

Reference

1. Keegan, R.-J., Lu, Z., Bogusz, J.M., *et al.* Photobiology of vitamin D in mushrooms and its bioavailability in humans. *Dermatoendocrinol.* **5**(1), 165-176 (2013).

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
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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