

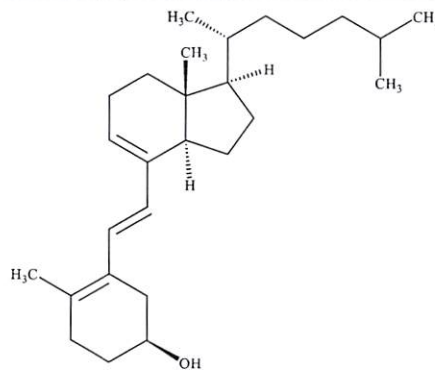
Certificate of Analysis

Certificate No.: **20250613025**



Date: June 13, 2025

Retest date: June 12, 2026

Compound Name: Cholecalciferol EP Impurity E (Tachysterol 3)	
Synonyms:	(S)-4-methyl-3-((E)-2-((1R,3aR,7aR)-7a-methyl-1-((R)-6-methylheptan-2-yl)-2,3,3a,6,7,7a-hexahydro-1H-inden-4-yl)vinyl)cyclohex-3-en-1-ol
TLC Catalogue Number:	C-518
CAS Number:	17592-07-3
Alternate CAS Number:	N/A
Molecular Weight:	384.65
Molecular Formula:	C ₂₇ H ₄₄ O
Source:	TLC Pharmaceutical Standards
Source Lot No.:	6268-086A3
Storage Conditions:	Protect from light and air, store at -20 °C
Solubility:	THF



Test Description	Specifications	Results
Visual Description	Yellow semi-solid (low M.P.)	Conforms
Identification		
IR	Conforms to structure	Conforms
MS	Conforms to structure	Conforms
¹ H NMR	Conforms to structure	Conforms
Purity (HPLC)	Not less than 90.0%	95.9%
Impurity (HPLC)	RT 5.30, 0.45%; RT 6.53, 0.51%; RT 10.13, 1.69%	
Residual Solvents (NMR)	1.6% ethyl acetate	
Assay (qNMR)	Not less than 65.0%	68.1%
Recommendation:	Release. The compound is unstable and can easily deteriorate. It should be stored as the storage condition stated in COA, and to be used immediately upon received. It contains 1.7% Cholecalciferol (Vitamin D3) (RT 10.13, TLC No. C-511) according to its HPLC and LC-MS.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		06/13/2025
Approved by:	Quality Assurance		06/13/2025

Attachments: Peak Attribution Table, HPLC, IR, MS and NMR spectra.