

TECHNICAL DATA SHEET

Vitamin D3 (Cholecalciferol)

40MIU/g USP39/EP9.0

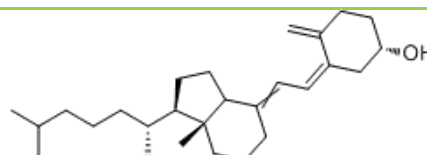
Chemical Properties

CAS No: 67-97-0;

EINECS No.: 200-673-2

Chemical Formula: $C_{27}H_{44}O$

Molecular Weight: 384.64



Description

Vitamin D3, also known as Cholecalciferol, has the physiological function to promote intestinal calcium absorption, regulate calcium and phosphorus metabolism and induce bone calcium and phosphorus calm, as well as promote bone growth and prevent rickets.

Solubility

Practically insoluble in water, freely soluble in ethanol (96 per cent), soluble in trimethylpentane and in fatty oils

Specification

Item	Specification	Test Method
Identification	A: Infrared Absorption (197K)	USP39/EP9.0
	B: Ultraviolet absorption (197U)	USP39
	C: Color Test	USP39
	D: TLC	USP39
Specific rotation	+105.0° ~ +112.0°	USP39/EP9.0
Assay (as $C_{27}H_{44}O$)	97.0-103.0%	USP39/EP9.0
	38,800,000-41,200,000IU/G	
Related substances		EP9.0
Trans-vitamin D3	Max 0.1%	
Pro-vitamin D3	Max 0.1%	
Lumisterol ₃	Max 0.1%	
Iso-tachysterol ₃	Max 0.1%	
Tachysterol ₃	Max 0.1%	
Unspecified Impurities	Max 0.1%	
Total related substances	Max 1.0%	
Residual Solvents		GC, USP
Methanol	Max 3,000ppm	
Hexane	Max 290ppm	
Chlorobenzene	Max 360ppm	

Ingredients

Pure Vitamin D3 crystalline

Labeling

In the United States and the European Union: Vitamin D3 (Cholecalciferol)

Applications

Used as API in the pharmaceutical industry for preparation, and also used as vitamin additive in food and drink industry. For the prevention and treatment of rickets, osteomalacia, osteoporosis, and hypoparathyroidism.

Safety

This product is safe for the intended use. Avoid ingestion, inhalation of dust or direct contact by applying suitable protective measures and personal hygiene. See Material Safety Data Sheet for full safety information.

Handling recommendations

Keep locked up Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with eyes. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label.

Packaging, Storage & Shelf Life

Package	500g/tin; or according to customers' requirements.
Storage	Store in a well-closed container away from moisture and direct sunlight.
Shelf life	3 years if sealed and stored properly.