

Vitamin D3 (Cholecalciferol)

Fat-soluble vitamin – Cholecalciferol

Product Description

Pharmaceutical/Nutraceutical-grade Cholecalciferol (Vitamin D3) available as oil, dry powder and granules for supplementation formulations. Available to BP/USP standards.

Certificate of Analysis

HSN Code: 2936.21

CAS Number: 67-97-0

Classification: Pharmaceutical API / Nutraceutical

Parameter	Specification	Test Method
Appearance	White to off-white crystalline powder or oily liquid	Visual
Assay	97.0–103.0%	HPLC (UV 265 nm)
Identification	UV absorption maximum at 265 nm	UV
Melting Point (powder)	84–88°C	USP <741>
Loss on Drying (powder)	"d 0 . 5 %	USP <731>
Related Substances	Conforms to USP/BP limit	HPLC
Heavy Metals	"d 2 0 p p m	USP <231>

Physical Properties

Appearance: White to off-white crystalline powder (or oily solution)

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

Molecular Weight: 384.64 g/mol

Solubility: Practically insoluble in water; freely soluble in ethanol and oils

Melting Point: 84–88°C

Packing: 25 kg HDPE drums with inner polyethylene liner; 1 kg, 5 kg aluminium foil pouches (light-protected)

Storage: Store in a cool, dry, well-ventilated area away from light. Below 25°C. Protect from oxidation.

Safety & Handling

PPE: Gloves, safety goggles, lab coat

Hazards:

- Light and oxygen sensitive
- Hypercalcemia risk at very high doses