

## **Certificate of Analysis**

Product Name	Vitamin D3		
Batch No.	20170305	Quantity	20kg
MFG. Date	Mar.05.2017	EXP .Date	Mar.04.2019
CAS No.	67-97-0	Specs	USP39/EP9.0

ITEMS	SPECIFICATION	RESULTS
Appearance	White crystals	Conforms
Solubility	Practically insoluble in water, freely soluble in ethanol (96 percent), solule in trimethylpentane and in fatty oils	Conforms
Specific rotation	+105.0°~+112.0°	+107.7°
As	≤1ppm	Conforms
Heavy metals	≤20ppm	Conforms
Residual solvents	Methanol:≤3000ppm	Conforms
	Hexane:≤290ppm	Conforms
	Methyl formate:≤100ppm	Conforms
	Acetone:≤500ppm	Conforms
	Benzene:≤2ppm	Conforms
	Trans-vitamin D3:≤0.10%	Conforms
	Pro-vitamin D3:≤0.10%	Conforms
	Lumisterol3:≤0.10%	Conforms
Related substances	Iso-tachysterol3:≤0.10%	Conforms
	Tachysterol3:≤0.10%	Conforms
	Unspecified impurities:≤0.10%	Conforms
	Total:≤1.0%	Conforms
Content	Contest 000/ 4000//20 200 000 40 200 000U/-\	98.4%
Content	98%~102%(39,200,000~40,800,000IU/g)	39,360,000IU/g
Conclusion	Up to the USP39/EP9.0	
Remarks		

Quality Control Dept: Analyst: Inspector: