

Product Name: Vitamin D₃

TEST	SPECIFICATION	RESULTS
Description		
Description	White or almost white crystals, odourless or almost odourless.	White crystals, odourless.
Identification		
INFRARED ABSORPTION	Infra-red absorption spectrum of test sample shall be in concordant with the reference spectrum of Cholecalciferol standard.	Complies
Solubility		
Solubility	Freely soluble in ethanol (95 per cent), in acetone, in chloroform and in ether; practically insoluble in water. It is soluble in fixed oils.	Complies
Specific optical Rotation		
Specific Optical Rotation	105 to 112 °	107 °
U.V. Absorptiometric Determination		
Light absorption at 265nm of 0.001% Solution in ethanol	0.46 to 0.50	0.48
7-DEHYDROCHOLESTEROL		

TEST	SPECIFICATION	RESULTS
7-DEHYDROCHOLESTEROL	In the chromatogram obtained with the test solution any violet spot with an R _f value slightly lower than that of the principal spot (due to 7- Dehydrocholesterol and appearing slowly) shall not be more intense that the spot in the chromatogram obtained with reference solution (a).	Complies
Assay		
HPLC	97.0 to 103.0 %	99.6 %
Residual solvents		
Methanol	Maximum 1000 ppm	<6.00 ppm
Ethanol	Maximum 1000 ppm	<10.00 ppm
Pyridine	Maximum 100 ppm	<4.00 ppm
Methyl Formate	Maximum 1000 ppm	126.49 ppm
Petroleum Ether	Maximum 290 ppm	<2.00 ppm
Acetone	Maximum 1000 ppm	<10.00 ppm
Benzene	Maximum 2 ppm	<0.2 ppm

OPINION: The above product is declared as standard quality.