

Certificate of Analysis

Product: <u>Cyanocobalamin</u>	Cert. No.: <u>01250303501</u>
Batch No. <u>012503035</u>	Mfg. Date : <u>Mar.11,2025</u>
Weight: <u>23065g</u>	Cert. Date : <u>Mar.20,2025</u>
Retest Date: <u>Mar.10,2030</u>	

Test item	Specifications	Results
Characters	Dark red crystals or crystalline red powder	Complies
Identification A (UV)	Absorption maxima at 278±1nm, 361±1nm and 550±2nm	Complies
	A361/A278 nm 1.70-1.90	1.85
	A361/A550 nm 3.15-3.40	3.25
Identification B (Chemistry)	Positive	Positive
Identification C (HPLC)	The retention time of the major peak of the sample solution corresponds to that of the standard solution	Complies
Loss on drying	≤12.0%	5.6%
Assay(on dry basis) (UV)	96.0~102.0%	99.2%
Related substances (HPLC)		
Total impurities	≤3.0%	1.3%
7β,8β-Lactocyanocobalamin	≤1.0%	0.1%
50-Carboxycyanocobalamin	≤0.5%	0.1%
32-Carboxycyanocobalamin	≤2.0%	Not Detected
34-Methylcyanocobalamin	≤1.0%	0.5%
8-Epi-Cyanocobalmin	≤1.0%	Not Detected
Any other unidentified impurity	≤0.5%	0.2%
Residual solvent (GC)		
Acetone	≤0.5%	0.006%
Total plate count (Plate culture)	≤1000cfu/g	90cfu/g

Conclusion: This product complies with the specifications of USP 2024.

