



## CERTIFICATE OF ANALYSIS

<b>Product Name:</b> Vitamin B12 (Cyanocobalamin) C	<b>Manufacture Date:</b> 2023.06.04
<b>Batch No:</b> TA2023060413	<b>Analysis Date:</b> 2023.06.06
<b>Batch Quantity:</b> 500kg	<b>Expiration Date:</b> 2025.06.03

Items	Specifications	Results	Test Methods
Appearance	Dark red crystals or crystalline powder	Complies	Visual Method
Identification A	A361nm/A278nm:1.70-1.90 A361nm/A550nm:3.15-3.40	1.85 3.18	UV
Identification B	The retention time of major peak of the sample solution corresponds to that of the standard solution.	Complies	HPLC
Identification C	Positive	Complies	
Loss on drying	≤ 12.0%	4.1%	USP<731>
Assay on dried basis	96.0%- 102.0%	99.1%	UV
Total impurities	≤3.0%	1.60%	HPLC
7 β 、 8 β -lactocyanocobalamin	≤ 1.0%	0.01%	
50-carboxycyanocobalamin	≤0.5%	0.23%	
34-methylcyanocobalamin	≤2.0%	0.56%	
32-carboxycyanocobalamin	≤1.0%	Not detected	
8-Epi-cyanocobalamin	≤1.0%	0.10%	
Any other unidentified impurity	≤0.5%	0.38%	
Total aerobic bacteria count	≤ 1000cfu/g	40cfu/g	USP<2021>
Yeasts and Molds	≤ 100cfu/g	Not detected	USP<2021>
E.coli	Negative	Not detected	USP<2022>
Residual solvents	Acetone≤0.5%	0.20%	Enterprise
Conclusion	Conform with USP36		
Storage condition	Store in cool & dry place, Do not freeze. Keep away from strong light and heat.		
Shelf life	2 years when properly stored		