



CERTIFICATE OF ANALYSIS

Product Name	Vitamin B12(Cyanocobalamin)		
Batch Number	20230409	Manufacture Date	20230409
According as	PH.Eur.8.2 and in house standard		

Item of Analysis	Specification	Results	Test Methods
Organoleptic			
Appearance	Powder	Conforms	Organoleptic
Color	Dark red crystalline powder	Conforms	Monograph:0547 Visual Method
Physical Characteristics			
Identification A (UV)	Absorption maxima at 278 ±1nm,361±1nm and 550 ± 2nm	Complies	PH.Eur.monograph /Ph.Eur<2.2.27>
Ratio absorbances	A361/A278nm 1.70-1.90	1.83	PH.Eur.monograph /Ph.Eur<2.2.25>
	A361/A550nm 3.15-3.40	3.29	
Loss on drying	10%NMT (%)	3.86%	PH.Eur.monograph /Ph.Eur<2.2.32>
Assay	97.0%-102.0%	98.92%	PH.Eur.monograph
Total impurities(HPLC)	≤3.0%	1.35%	PH.Eur.monograph /Ph.Eur<2.2.29> (HPLC)
7 β ,8 β -Lactocyanocobalamin	≤1.0%	Not detected	
50-Carboxycyanocobalamin	≤0.5%	Not detected	
34-Methylcyanocobalamin	≤2%	0.58%	
32-Carboxycyanocobalamin	≤1%	Not detected	
8-Epi-Cyanocobalmin	≤15	Not detected	
Any other unidentified impurity	≤0.5%	≤0.2%	
Residue of Solvents	Acetone ≤0.5%	0.006%	GC
Microbiological Tests			
Total Plate Count	800cfu/g Max	70cfu/g	Ph.Eur<2.6.12>
Yeast & Mold	80cfu/g Max	25cfu/g	Ph.Eur<2.6.12>
E. Coli	Negative	Conform	Ph.Eur<2.6.13>

Storage: Store in tight, light-resistant containers, avoid exposure to direct sunlight, moisture and excessive heat. Shelf Life: 24 months if store under the conditions above and stay in original packaging.