

Certificate of Analysis

Product name	VITAMIN B12	Report No.	20181113
Batch no.	18110101	Mfg. Date	2018.11.01
Batch Quantity	20KGS	Expiry Date	2023.10.31
Packing	1KG/TIN	Date of Analysis	2018.11.08
Test Description	Method principle	Quality standard	Results
Appearance		Dark red, crystalline powder or dark red crystals	Dark red, crystalline powder
Identity			
Identification	UV	Absorbance ratio: A ₃₆₁ /A ₅₄₇₋₅₅₉ =3.15~3.40 A ₃₆₁ /A ₂₇₈ =1.70~1.90	A ₃₆₁ /A ₅₅₀ =3.28 A ₃₆₁ /A ₂₇₈ =1.88
		Color reaction conform	Conform
	HPLC	The retention time of the major peak of the Sample solution corresponds to that of the Standard solution.	Conform
Assay(basis drying)	UV	96.0%~102.0%	98.2%
Miscellaneous			
Loss on drying		≤12.0%	3.4%
Impurity Profile			
Related substances	HPLC	Total impurities ≤3.0%	1.01%
		7β,8β-Lactocyanocobalamin ≤1.0%	<0.1%
		34-Methylcyanocobalamin ≤2.0%	0.11%
		8-Epi-cyanocobalamin ≤1.0%	<0.1%
		50-Carboxy cyanocobalamin ≤0.5%	0.32%
		32-Carboxy cyanocobalamin ≤0.5%	<0.1%
		Any other unidentified impurity ≤0.5%	0.17%
Residual solvent	GC	Acetone ≤5000ppm	ND
Other assays			
Total aerobic microbial count		≤1000cfu/g	120cfu/g
Molds ,yeasts		≤100cfu/g	30cfu/g
Conclusion	The test product complies with requirements of USP40		

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