Singapore Hengtai Industrial Co.,Ltd

Room 1508, 15/F, Grand Central Office Tower 2, 625 Nathan Road, Mongkok, Hong Kong

COA No.:25061901

Certificate of Analysis

Product Name	Vitamin B12	**Batch No.**	MKC-250618
Molecular Formular	C63H89CoN14O15P	**Molecular Weight**	1371.38
Mfgt.Date	2025-05-28	**Retest Date**	2027-05-28

Tests	**Acceptance Criteria**		**Results**
Appearance	White or off-white powder		White powder
Solubility	Can be dissolved to 10mg/mlin pure water		Conforms
Molecular Ion Mass	1371.38±1		Conforms
pH	6.0~9.0(C=10mg/ml)		7.6
Purity(HPLC)	>98.0%		99.47%
Related substances(HPLC)	The largest individual impurity test NMT 1.0%		0.46%
	The total impurities test NMT 2.0%		0.16%
Residual solvent(GC)	Methylene chloride	NMT 600ppm	N.D
	Acetonitrile	NMT 400ppm	302ppm
	Methanol	NMT 3000ppm	N.D
	NN-Dimethylformamide	NMT 890ppm	N.D
	Isopropyl ether	NMT 5000ppm	N.D
Assay	80.0%~120.0%		91.96%
TFA Content	≤0.500%		Conforms
Bacterial Endotoxins	NMT10 EU/mg		Conforms
Microbial Limits	TAMC	NMT 1000 cfu/g	Conforms
	TYMC	NMT100 cfu/g	Conforms
	Escherichia Coil presence	Negative	Conforms
	Salmonella	Negative	Conforms
	P.Aeruginosa	Negative	Conforms
	S.Aureus	Negative	Conforms
Sodium ion	NMT 3 .0%		1.6%
Peptide Content(Mass Balance)	NLT 80.0%		98.42%
Conclusion:conformed with the product standards.			

For and on behalf of
Singapore Hengtai Industrial Co., Limited
新加坡恆泰實業有限公司
Authorized Signature(s)

Storage Conditions: Keep in tight container,protect from light,store at a temperature of 20±5℃.

For research and expott only

For and on behalf of
Singapore Hengtai Industrial Co., Limited
新加坡恆泰實業有限公司

INITIATOR: 王磊 2025-6-12 **REVIEWER:** 高鑫 2025-6-1

Authorized Signature(s)