



CERTIFICATE OF ANALYSIS

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SAMPLE IDENTIFICATION

PRODUCT NAME	B12 Methylcobalamin	CLIENT	Cryonic Labs
LABEL STRENGTH	10ML	LOT / BATCH NO.	FL-2417-G25
MOLECULAR FORMULA	C63H91CoN13O14P	MANUFACTURE DATE	06 Mar 2026
MOLECULAR WEIGHT	1344.38 g/mol	DATE OF ANALYSIS	13 Mar 2026
CAS NUMBER	13422-55-4	RETEST / EXPIRY	05 Mar 2028

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT	STATUS
Appearance	Visual	Clear colourless solution	Conforms	PASS
Identification	FTIR / UV-Vis	Matches reference spectrum	Conforms	PASS
Purity / Assay	HPLC-UV 220 nm	≥ 98.0 %	99.27 %	PASS
Retention Time	HPLC-UV 220 nm	Matches reference	12.26 min	PASS
Single Max Impurity	HPLC-UV 220 nm	≤ 1.00 %	0.47 %	PASS
pH	USP <791>	4.5 – 7.0	6.14	PASS
Benzyl Alcohol	GC-FID	0.85 – 0.95 % w/v	0.918 % w/v	PASS
Particulate Matter	USP <788>	Conforms	Conforms	PASS
Bacterial Endotoxins	LAL Kinetic	< 0.50 EU/mg	0.07 EU/mg	PASS
Microbial Limits	USP <61>	< 100 CFU/g	< 10 CFU/g	PASS
Heavy Metals	ICP-MS	≤ 10 ppm	2.2 ppm	PASS
Sterility of Fill	USP <71>	No growth	No growth	PASS

CONCLUSION

The submitted sample of B12 Methylcobalamin (10ML), lot FL-2417-G25, was analysed under the methods listed above and conforms to all release specifications with a chromatographic purity of 99.27 %. Material is supplied for laboratory research use only. Not for human or veterinary use, and not for diagnostic or therapeutic application. Retain sample stored at 15-25 °C, protected from light.

99.27%
PURITY

Dr. M. Ellingsworth, Ph.D.

Laboratory Director, Freedom Laboratories LLC
Signed 13 Mar 2026 · Report No. COA-FL-2417-G25