CLIENT & SAMPLE INFORMATION

Client	Zenergy	Certified Date	09/29/2026
Lot / Batch	A-260923-CLR-SIL	Product Name	Lipo-C + B12
Form / Matrix	Liquid Blend	Volume	10 mL

This Certificate of Analysis confirms the identity and quality of the multi-component liquid blend listed herein. Compound identification was performed by HPLC-UV with LC-MS/MS confirmation. Declared active components were evaluated against their expected molecular masses and chromatographic profiles.

ACTIVE COMPONENT IDENTITY (LC-MS/MS)

Ingredients OBSERVED in this sample by LC-MS (ESI Q-TOF), listed with the ion actually measured. Each m/z below is a measurement of this vial, accepted against the run's own mass-accuracy figure. Accurate mass establishes a mass and an elemental composition, not a structure, and peak intensity is not proportional to concentration - this table reports PRESENCE, not content or proportion.

Component	Theoretical m/z [M+H]+	Observed m/z	Status
L-Methionine	150.06	150.06	DETECTED
myo-Inositol measured as myo-Inositol / Glucose / Fructose	181.07	203.0518 [M+Na]+	DETECTED
Choline	104.1070	104.1065 intact cation	DETECTED
L-Carnitine	162.1125	162.1118	DETECTED
Pantothenic acid (B5)	242.0999	242.0991 [M+Na]+	DETECTED
Cyanocobalamin (B12)	1355.5747	1355.5695	DETECTED
L-Arginine	175.1190	175.1182	DETECTED
Pyridoxine (B6)	170.0812	170.0804	DETECTED
L-Proline	116.0706	116.0700	DETECTED

Method: LC-MS (ESI Q-TOF), untargeted profile against a curated panel of compounds catalogued in liquid blends | 9 ingredient(s) observed. Only compounds OBSERVED in this sample are listed. A compound not listed here is not thereby absent from the product: the panel, the acquired mass range and positive-mode ionisation each bound what this method can see, and acidic or negative-mode species are poorly seen or invisible.

PHYSICOCHEMICAL PROPERTIES

Property	Specification	Result	Status
Appearance / Color	Conforms	Conforms	PASS
Physical Form	Liquid	Liquid	PASS
Particulate Matter	Essentially free	Conforms	PASS

ADDITIONAL QUALITY SCREENS

ENDOTOXIN SCREEN

Method	LAL (USP <85>)
Limit	<= 0.5 EU/mL
Result	< 0.10 EU/mL
Status	PASS

STERILITY / MICROBIAL SCREEN

Method	BacT ALERT automated microbial growth detection
Specification	No Growth
Incubation	14 days
Result	No Growth
Fungi	Not Detected
Status	PASS

HEAVY METAL SCREEN

Method	ICP-MS
Specification	Compliant
Result	PASS
Status	PASS

TESTING METHODOLOGY

Compound Identity (LC-MS/MS)
Multi-component identity confirmation performed by reverse-phase HPLC with UV detection coupled with tandem mass spectrometry (LC-MS/MS). Each declared active is identified by retention time and, where a characteristic ion is available, confirmed by observed [M+H]+ molecular ion matched against its theoretical mass. Highly polar components lacking a UV chromophore (e.g. free amino acids) are reported by identity confirmation and may require orthogonal (derivatization / HILIC) methods for full quantitation.

