Product Specification Sheet

1. Product Description

Product Name:	Pure Methylcobalamin (Vitamin B12) — Bulk Food Grade
Chemical / Common Name:	Methylcobalamin
Synonyms:	Mecobalamin, methyl-B12, vitamin B12 (active coenzyme form)
Ingredient Statement:	Methylcobalamin
Molecular Formula / Weight:	C63H91CoN13O14P / 1344.4 g/mol
CAS No. / HS Code:	13422-55-4 / 2936.26
Grade:	☐ Conventional ☐ Organic ☒ Food Grade ☐ USP / FCC
Country of Origin:	—
Description:	Dark red crystals or crystalline powder, odourless to slightly odourless. Pure (undiluted) methylcobalamin.

2. Physical & Chemical Characteristics

Parameter	Specification	Method
Appearance	Dark red crystals or crystalline powder	Organoleptic
Odour	Odourless to slightly odourless	Organoleptic
Identification	NLT 95 %	FT-IR
Assay, dry basis (%)	100 (± 20)	UV-Vis
Loss on Drying (%)	≤ 12	Moisture balance

3. Contaminants

Parameter	Specification	Method
Arsenic (As) (ppm)	≤ 2.0	ICP-MS
Cadmium (Cd) (ppm)	≤ 1.0	ICP-MS
Lead (Pb) (ppm)	≤ 0.5	ICP-MS
Mercury (Hg) (ppm)	≤ 0.5	ICP-MS

4. Microbiological Characteristics

Parameter	Specification	Method
Total Plate Count (CFU/g)	≤ 1,000	Petrifilm
Yeast & Mould (CFU/g)	≤ 100	Petrifilm
Total Coliforms (CFU/g)	≤ 10	Petrifilm
E. coli	Absent in 10 g	Petrifilm
Salmonella	Absent in 10 g	Compact Dry

5. Allergen Declaration

Priority Allergen (Health Canada)	Present in Product	Same Line / Facility
Peanuts	☐ Yes ☐ No	☐ Yes ☐ No
Tree nuts	☐ Yes ☐ No	☐ Yes ☐ No
Sesame seeds	☐ Yes ☐ No	☐ Yes ☐ No
Milk	☐ Yes ☐ No	☐ Yes ☐ No
Eggs	☐ Yes ☐ No	☐ Yes ☐ No

Priority Allergen (Health Canada)	Present in Product	Same Line / Facility
Fish	☐ Yes ☐ No	☐ Yes ☐ No
Crustaceans & molluscs	☐ Yes ☐ No	☐ Yes ☐ No
Soy	☐ Yes ☐ No	☐ Yes ☐ No
Wheat & triticale	☐ Yes ☐ No	☐ Yes ☐ No
Gluten (barley, oats, rye)	☐ Yes ☐ No	☐ Yes ☐ No
Mustard	☐ Yes ☐ No	☐ Yes ☐ No
Sulphites (≥ 10 ppm)	☐ Yes ☐ No	☐ Yes ☐ No

6. Regulatory Status

GMO Status:	☐ Non-GMO ☐ Contains GMO ☐ Not applicable
Irradiation:	☐ Not irradiated ☐ Irradiated
Certifications:	☐ Kosher ☐ Halal ☐ Organic ☐ Vegan ☐ Other: _____
BSE / TSE Statement:	—
Standard of Quality:	Manufacturer finished-goods specification.

7. Packaging, Storage & Shelf Life

Uses:	Vitamin B12 source for supplements, vitamin premixes and fortified foods and beverages.
Packaging:	Food-grade sealed pouches, repacked from the manufacturer's original packaging.
Storage Conditions:	Store in tight, light-resistant containers. Avoid exposure to direct sunlight, moisture and excessive heat.
Shelf Life:	—
Lot Code Format:	YYYYMMDDNN (repack date + sequence), traceable to the manufacturer lot.

8. Quality Assurance Review

Reviewed By (QA): LiquidShop Quality Assurance **Review Date:** 2026-10-08

This document was prepared electronically and reviewed by LiquidShop Quality Assurance. It is valid without a signature.

The information contained in this document is accurate to the best of our knowledge. It is the responsibility of the user to ensure the product is suitable for its intended application and complies with applicable regulations.