



MP Biomedicals, LLC

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Certificate of Analysis

Product Description: Vitamin B12 (cyanocobalamin), USP_
Catalog Number: 199652_
Lot: Q9043_

Formula: C₆₃H₈₈CoN₁₄O₁₄P

CAS #: 68-19-9

Physical Description: Dark Purple to Maroon Crystalline Powder

Formula Weight: 1355.42

Storage: desiccate, 2 - 8°C

Test	Specification	Results
Identity Test A	Passes	Passes
Identity Test B	Passes	Passes
Identity Test C	Passes	Passes
Assay	96.0 - 100.5%	98.50% (Dried Basis)
Loss on Drying	#12.0%	3.3%
Pseudocyanocobalamin	Passes	Passes
Expiration Date	Month/Day/Year	06/30/2021

Absorbance ratios: A361/A278 = 1.87

A361/A550 = 3.28

Arsenic: <3 ppm

Cadmium: <1 ppm

Lead: <1 ppm

Mercury: <0.1 ppm

Residual solvents:

- Acetone: 17 ppm

- Ethanol: <5000 ppm

Microbiology:

- Total plate count: <10 cfu/g

- Yeast & Mold: <10 cfu/g

- Coliforms: Negative

- E.coli: Negative

- Staph. aureaus: Negative

- Salmonella: Negative

04/17/2018 - John Huang, PhD
MP Biomedicals, LLC.
Quality Control Manager

A large, stylized handwritten signature in black ink that reads "J Huang". The signature is written in a cursive, flowing style with a long tail on the letter "g".

This is an electronically generated document

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Online Ordering, MSDSs, certificates of analysis and data sheets now available on our web site

Technical Service: 1-800-279-5490 (440-337-1200) Customer Service: 1-800-854-0530 (440-337-1200)