Title: MultiMin		
Allergy Research Group* / NutriCology*		
Document No.: 70210CA	Revision: 010	

Certificate of Analysis

Part Number	70210		
Lot Number	9053	23	
Product Count & Form	120 Vegetarian	Capsules	
Packaging, Closure	275 cc bottle, C	Child Resistant Cap, desig	ccant, rayon/cotton
Storage Condition	Room Tempera		
Shelf Life	36 months	Expiration Date	06/22
Label Number, Size	70210L, I		
Retain Sample	2 bottles per la	bel (4 bottles total)	

ANALYSIS

Attribute	Method / SOP	Specification	Test Result
Product Color, Size	SOP 515	White, clear size "00"	Complies
Product Weight	SOP 514	Meets USP <2091> 980 – 1260 mg	1,097 mg
Disintegration Time	SOP 522	Meets USP <2040>	Passes, 22:40 min

Troduction and Trocess control for HTMC capsu

Purity/Strength per Capsule

Active Ingredients	Label Claim	Release Limits	Test Result
Calcium (as Calcium Citrate)	83 mg	100-150% by ICP-OES	87mg
Iron (as Ferric Ammonium Citrate)	6 mg	100-150% by ICP-OES	100-150% by ICP-OES*
Magnesium (as Magnesium Glycinate)	83 mg	100-150% by ICP-OES	105mg
Zinc (as Zinc Citrate)	10 mg	100-150% by ICP-OES	100-150% by ICP-OES*
Selenium (as Sodium Selenite)	33 mcg	100-150% by ICP-OES	100-150% by ICP-OES*
Copper (as Copper Sebacate)	0.5 mg	100-150% by ICP-OES	100-150% by ICP-OES*
Manganese (as Manganese Sulfate)	5 mg	100-150% by ICP-OES	100-150% by ICP-OES*
Chromium (as Amino Acid Complex)	133 mcg	100-150% by ICP-OES	100-150% by ICP-OES*
Molybdenum (as Sodium Molybdate)	83 mcg	100-150% by ICP-OES	100-150% by ICP-OES*
Potassium (as Potassium Chloride)	33 mg	100-150% by ICP-OES	33mg
Boron (as Boric Acid)	333 mcg	100-150% by ICP-OES	100-150% by ICP-OES*

Title: MultiMin

Allergy Research Group* / NutriCology* Document No.: 70210CA

Active Ingredients Label Claim **Release Limits Test Result** Vanadium (as Sodium 100-150% by 67 mcg 100-150% by Metavanadate) **ICP-OES ICP-OES*** Glutamic Acid 67 mg 100-150% by 69mg HPLC **Other Ingredients** Hydroxypropyl methylcellulose, L-leucine

Revision: 010

*Production and Process Control,

Identification \ Chemical \ Heavy Metals

Attribute	Method / SOP	Specification	Test Result
Identity	Bulk Certificate of Analysis Review	Approved	Approved
Identity	Near Infrared Spectroscopy	Matches reference	Matches reference
Arsenic (inorganic)	ICP-MS per USP <2232>	≤15 mcg/day Ψ	1.188 mcg/day Ψ
Cadmium	ICP-MS per USP <2232>	\leq 5 mcg/day Ψ	1.617 mcg/day Ψ
Mercury (total)	ICP-MS per USP <2232>	\leq 15 mcg/day Ψ	BQL
Lead	ICP-MS per USP <2232>	\leq 10 mcg/day Ψ	0.594 mcg/day Ψ

*Production and Process Control, Ψ – Permitted Daily Exposure, BQL: Below Quantitative Level

Microbiology

Attribute	Method / SOP	Specification	Test Result
Total Aerobic Count	USP/ AOAC/ FDA BAM	$\leq 1 \ge 10^3 \text{ CFU/g}$	<10 CFU/g
Total Yeast & Mold	USP/ AOAC/ FDA BAM	$\leq 1 \ge 10^2 \text{ CFU/g}$	<10 CFU/g
Coliform	USP/ AOAC/ FDA BAM	$\leq 1 \ge 10^2 \text{ CFU/g}$	<10 CFU/g
Escherichia coli	USP/ AOAC/ FDA BAM	None Detected	None Detected
Staphylcoccus aureus	USP/ AOAC/ FDA BAM	None Detected	None Detected
Salmonella	USP/ AOAC/ FDA BAM	None Detected	None Detected

*Production and Process Control

Approval:	4	Date:	06/19/19	



Micro Quality Labs, Inc.

Specializing in Pharmaceutical, Dietary Supplements, Toys and Cosmetics Testing 3125 N. Damon Way • Burbank, California 91505 (818) 845-0070 • Fax: (818) 845-0030 E-Mail: <u>Karine@MicroQualityLabs.com</u>

Customer:Allergy Research Group, LLCAddress:2300 North Loop RoadAlameda, CA 94502

ANALYTICAL/CHEMICAL CERTIFICATE OF ANALYSIS

Sample Name: MULTIMIN Product Code: 40210 Batch/Lot: 90523 MQL Accession: 190611-0202

PO#: MH06072019 Sample Description: BULK Rush: 2-3 business days Received Date: 06/11/19

Test Requested:	Test Method:	Specification:	Results:	
Glutamic Acid	MQLTM-0198	NLT 67 mg / cap	69 mg / cap	
	By GC-FID	10000	, 0.5.28e 0.544	

Prepared By:

Kendra Hensley/Document Control Specialist

Reviewed By:

06/17/19 JUN 1 7 2019

06/17/19

JUN 1 7 2019

Raffie Avakian/Quality Assurance Reviewer

The aforementioned results on this report are representative of the samples submitted and may not be indicative of the entire manufacture, batch, and/or lot. Applicable current GMP's shall always be used when sampling. GLP's shall always be practiced by Micro Quality Labs to ensure the most accurate results.

This report is submitted for the exclusive use of the person, partnership, or corporation to whom it is addressed, and neither the report nor the name of Micro Quality Labs, Inc. nor any member of its staff, may be used in connection with the advertising or sale of any product or process without written authorization from Micro Quality Labs, Inc. Failure to comply will result in immediate legal action by Micro Quality Labs, Inc.



Analytical Report June 13, 2019

Tuyen Luong			Page 1 of 1		
Allergy Resear	ch Group/NutriCology		WO Number:	W19F0)286
2300 North Lo					
Alameda, CA 9	94502				
Client:	Allergy Research Group-QC		Customer PO:	MH06072	2019
Client #:	А5537-Т		Date Received:	6/10/2	2019
Sample Type:	Capsule		Date Completed:	06/13/20	019
Collector:	Client		Discard Date:	06/27/2	2019
CSL#: 19F060	04 MultiMin - Lot#: 40210/9052	23			
Parameter	Result	PQL	Method	Date	Analyst
Arsenic	0.36 ug/g	0.050	ICP MS	06/13/19	RBP
Cadmium	0.49 ug/g	0.050	ICP MS	06/13/19	RBP
Calcium	79,230 ug/g	250	ICP MS	06/13/19	JTP
Lead	0.18 ug/g	0.050	ICP MS	06/10/19	KMS
Magnesium	95,530 ug/g	5.0	ICP MS	06/13/19	JTP
Mercury	<0.050 ug/g	0.050	ICP MS	06/13/19	RBP
Potassium	30,440 ug/g	70	ICP MS	06/13/19	JTP
CSL#: 19F060	4				
Parameter	Result	Serving Size	Unit Weigh	t Sp	ecification
Arsenic	0.36 ug/g	1 Capsule	1.10 g		<0.50 ug/g
Cadmium	0.49 ug/g	1 Capsule	1.10 g		<0.50 ug/g
Calcium	87 mg/cap	1 Capsule	1.10 g		mg/Capsule
Lead	0.18 ug/g	1 Capsule	1.10 g		<0.50 ug/g
Magnesium	105 mg/cap	1 Capsule	1.10 g		mg/Capsule
Mercury	<0.05 ug/g	1 Capsule	1.10 g		<0.50 ug/g
Potassium	33 mg/cap	1 Capsule	1.10 g		mg/Capsule
		•	e		

Respectfully Submitted, Chemical Solutions, Ltd.

QA Representative

Notes:

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The units for the PQL are the same as those shown for the result.

931 north seventh st harrisburg, pa 17102 phone 717/697-7536 fax 717/697-4800

www.chemicalsolutionsltd.com

Project Description: Product Testing (PO # MH06072019) Report Issued To: Allergy Research Group 2300 North Loop Alameda, CA 94501 Contact: Janice Vu

Certificate of Analysis

AEMTEK #: 1906397

Sample Received: 2019-06-10 Analysis Started: 2019-06-10 Analysis Performed By: EM, MM, JC, WY Report Issue Date: 2019-06-13

Sampling Date: 2019-06-07

	Analyte		Aerobic Plate Count	Total Coliforms	Yeast	Mold	Escherichia coli	Salmonella	Staphylococcus aureus
	Method		AOAC OMA 990.12		AOAC OMA 991.14 AOAC OMA 2014.05 AOAC OMA 2014.05 USP 37 <62> (mod.) USP 37 <62> (mod.) USP 37 <62> (mod.)	A0AC OMA 2014.05	USP 37 <62> (mod.)	USP 37 <62> (mod.)	USP 37 <62> (mod.)
	Reporting Unit		CFU/g	CFU/g	CFU/g	CFU/g	per 10g	per 10g	per 10g
N	Method Detection Limit for Reporting	Buj	10	10	10	10	PIA	PIA	PIA
Sample ID	Sample Description	Lot #/Code				RESULTS			
3	MultiMin	40210/ 90523	<10	<10	<10	<10	QN	QN	QN

 Terminology:
 CFU = Colony Forming Units
 g = gram

 < Indicates less than the reporting limit as noted</th>

 ND = Not Detected, negative, absent. Sensitivity is about 1 organism per test portion.
 BAM = FDA Bacteriological Analytical Manual

 AOAC OMA = Official Methods of Analysis of the AOAC International, 18th ed.

MPN = Most Probable Number P/A = Presence/Absence N/A = Not Applicble or not analyzed CP Staph = Coagulase Positive Staphylococci (Staphylococcus aureus) CMMEF = Compendium of Methods for the Microbiological Examination of Foods, 4th ed. AOAC RI = AOAC Research Institute Performance Tested.

JL 06/13/19