Title: **Humic Acid, 60 Vegetarian Capsules**	
Allergy Research Group® / NutriCology®	
Document No.: 76600CA	Revision: 004

Certificate of Analysis

Part Number	76600		
Lot Number	90112		
Product Count & Form	60 Vegetarian Capsules		
Packaging, Closure	100 cc bottle, desiccant, rayon/cotton		
Storage Condition	Room Temperature		
Shelf Life	24 months	Expiration Date	01/21
Label Number, Size	76600L, C		
Retain Sample	4 bottles total		

ANALYSIS

Physical

Attribute	Method / SOP	Specification	Test Result
Product Color & Size	SOP 515	Dark-Brown/Black, clear size "1"	Complies
Product Weight Variation	SOP 514	Meets USP <2091> 430 – 550 mg	Pass, 493 mg
Disintegration Time	SOP 522	Meets USP <2040>	22:25 min

Purity/Strength per Capsule

Active Ingredients	Label Claim	Release Limits	Test Result
Humic Acid	375 mg	100-150% LC by input	100-150% LC by HPLC*
Other Ingredients: Hydroxypropyl methylcellulose, Microcrystalline cellulose, L-leucine			

*Production and process control

Microbiology

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

*Production and process control

Title: **Humic Acid, 60 Vegetarian Capsules**	
Allergy Research Group® / NutriCology®	
Document No.: 76600CA	Revision: 004

Identification \ Chemical \ Heavy Metals

Attribute	Method / SOP	Specification	Test Result
Identity	Bulk Certificate of Analysis Review	Approved	Complies
Identity	Near Infrared Spectroscopy	Matches Reference	Complies
Humic acid	California Dept. of Food Argiculture Method # HA4/JC	Min 50%	66.41%
Fulvic acid	California Dept. of Food Argiculture Method # HA4/JC	Min 20%	29.62%
Arsenic (inorganic)	ICP-MS per USP <2232>	≤ 15 µg/day Ψ	2.078 µg/day
Cadmium	ICP-MS per USP <2232>	≤ 5 µg/day Ψ	0.216 µg/day
Mercury (total)	ICP-MS per USP <2232>	≤ 15 mcg/day	BQL
Lead	ICP-MS per USP <2232>	≤ 10 µg/day Ψ	4.018 µg/day

*Production and process control; Ψ Permitted Daily Exposure, BQL – Below quantitation Level

Approval:	Date: 03/27/19

IAS Laboratories

2515 East University Drive
Phoenix, Arizona 85034
(602) 273-7248
Fax (602) 275-3836

Date: February 5, 2019

Submitted by: Allergy Research Group

Report to: Tuyen Luong

Report #: 6662080

Date Received: January 29, 2019

Humic and Fulvic Analysis

		**	***	*	**
Sender ID	**IAS Lab #**	**Humic Acid %**	**Fulvic Acid %**	**Moisture %**	**Solid Material %**
46600/ 90112	874	66.41	29.62	2.95	1.03

*ASTM D2216-09

**California Dept. of Food and Agriculture Method # HA4/JC

***Separation & Analysis of Humic Acid (HA) and Fulvic Acid (FA), J.M Verploegh, & L.A. Brandvold.

chemical solutions ltd.®
trace elemental analysis

Analytical Report

February 13, 2019

Tuyen Luong
Allergy Research Group/NutriCology
2300 North Loop Road
Alameda, CA 94502

WO Number: W19A1141

Client: Allergy Research Group-QC
Client #: A5537-T
Sample Type: Capsule
Collector: Client

Customer PO: MH01262019
Date Received: 1/29/2019
Date Completed: 02/07/2019
Discard Date: 02/27/2019

CSL#: 19A3397 Humic Acid 375mg - Lot#: 46600/ 90112

Parameter	Result	PQL	Method	Date	Analyst
Arsenic	1.06 ug/g	0.050	ICP MS	02/06/19	RBP
Cadmium	0.11 ug/g	0.050	ICP MS	01/30/19	CEC
Lead*	2.05 ug/g	0.10	ICP MS	02/06/19	JTG
Mercury	<0.050 ug/g	0.050	ICP MS	01/30/19	CEC

CSL#: 19A3397

Parameter	Result	Serving Size	Unit Weight	Specification
Arsenic	1.06 ug/g	1 Capsule	0.49 g	<0.50 ug/g
Cadmium	0.11 ug/g	1 Capsule	0.49 g	<0.50 ug/g
Lead*	2.05 ug/g	1 Capsule	0.49 g	<0.50 ug/g
Mercury	<0.05 ug/g	1 Capsule	0.49 g	<0.50 ug/g

Respectfully Submitted,
Chemical Solutions, Ltd.

QA Representative

Notes:
CONFIDENTIAL REPORT. This report is confidential and is for the sole use of the addressee.
This report can only be reproduced in full.
The units for the PQL are the same as those shown for the result.

AEMTEK, INC.

466 Kato Terrace.
Fremont, CA 94539
Phone: 510-979-1979
Fax: 510-668-1980
E-mail: labdata@aemtek.com
Web: www.aemtek.com

Project Description: Product Testing (PO # MH01262019)
Report Issued To: Allergy Research Group
2300 North Loop
Alameda, CA 94501
Contact: Janice Vu

Certificate of Analysis

AEMTEK #: 19011392

Sampling Date: 2019-01-26
Sample Received: 2019-01-29
Analysis Started: 2019-01-29
Analysis Performed By: EM, WY, JC, SL
Report Issue Date: 2019-02-01

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.)
Reporting Unit			CFU/g	CFU/g	CFU/g	CFU/g	per 10g	per 10g	per 10g
Method Detection Limit for Reporting			10	10	10	10	P/A	P/A	P/A
Sample ID	**Sample Description**	**Lot #/Code**	**RESULTS**						
15	Humic Acid 375mg	46600/ 90112	<10	<10	<10	<10	ND	ND	ND

Terminology:

CFU = Colony Forming Units g = gram
< Indicates less than the reporting limit as noted
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.

02/01/19