

<b>Title: Boron Joint with CurcuWin, 90 vegetarian capsules</b>	
Allergy Research Group® / NutriCology®	
Document No.: 77160CA	Revision: 003

## Certificate of Analysis

<b>Part Number</b>	77160		
<b>Lot Number</b>	9000		
<b>Product Count &amp; Form</b>	90 vegetarian capsules		
<b>Packaging, Closure</b>	175 cc bottle, desiccant, cotton		
<b>Storage Condition</b>	Room Temperature		
<b>Shelf Life</b>	24 months	Expiration Date	03/21
<b>Label Number, Size</b>	77160L, C		
<b>Retain Sample</b>	2 bottles total - unopened		

### ANALYSIS

#### Physical

Attribute	Method / SOP	Specification	Test Result
Product Color, Size	SOP 515	Orange reddish, clear Veg Cap Size "0"	Complies
Product Weight	SOP 514	Meets USP <2091> 600- 720 mg	Pass, 675 mg†
Disintegration Time	SOP 522	Meet USP <2040>	Pass†

† Per CMO's CofA

#### Purity/Strength Per Capsule

Active Ingredients	Label Claim	Release Limits/ Test Method	Test Result
CurcuWIN® Turmeric Extract ( <i>Curcuma longa</i> ) root (min 20% Curcuminoids)	250 mg (min 50 mg curcuminoids)	100-150% LC by UPLC	56.4 mg Curcuminoids
Magnesium (as Magnesium Citrate)	20 mg	100-150% LC by ICP-MS	100-150% LC by ICP-MS*
Boron (as Boron citrate)	6 mg	100-150% LC by ICP-MS	7 mg

#### Other ingredients

Hydroxypropyl methylcellulose, L-leucine, silicon dioxide, microcrystalline cellulose.

\*Production and Process control

<b>Title: Boron Joint with CurcuWin, 90 vegetarian capsules</b>	
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**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
Arsenic (inorganic)	ICP-MS per USP <2232>	≤ 15 mcg/day Ψ	BQL
Cadmium	ICP-MS per USP <2232>	≤ 5 mcg/day Ψ	BQL
Mercury (total)	ICP-MS per USP <2232>	≤ 15 mcg/day Ψ	BQL
Lead	ICP-MS per USP <2232>	≤ 10 mcg/day Ψ	BQL

\*Production and Process Control, Ψ – Permitted Daily Exposure, BQL= Below quantitation limit

**Microbiology**

Attribute	Method / SOP	Specification	Test Result
Total Aerobic Count	USP/ AOAC/ FDA BAM	≤ 1 x 10 <sup>4</sup> CFU/g	<10 CFU/g
Total Yeast & Mold	USP/ AOAC/ FDA BAM	≤ 1 x 10 <sup>3</sup> CFU/g	<10 CFU/g
Coliform	USP/ AOAC/ FDA BAM	≤ 1 x 10 <sup>2</sup> 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

Approval: 	Date: 04/25/19
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## Certificate of Analysis

### Allergy Research Group

2300 North Loop Road  
Alameda California 94502 United States

<b>Sample Name:</b>	<b>Boron with Curcuwin</b>	<b>Eurofins Sample:</b>	<b>8333145</b>
<b>Project ID</b>	ALLER_RE_G-20190409-0016	<b>Receipt Date</b>	09-Apr-2019
<b>PO Number</b>	MH04052019	<b>Receipt Condition</b>	Ambient temperature
<b>Sample Serving Size</b>	1 Cap	<b>Login Date</b>	09-Apr-2019
<b>Description</b>	47160_A9000	<b>Date Started</b>	22-Apr-2019
		<b>Online Order</b>	20

Analysis	Result
<b>Calculated Sample Weight</b>	
Entity Weight	0.6781 g
Entity Fill Weight	0.5709 g
<b>Determination of Total Curcuminoids in Turmeric Products by UPLC</b>	
Curcumin	45.2 mg/Serving Size
Desmethoxy Curcumin	9.58 mg/Serving Size
Bis-Desmethoxy Curcumin	1.61 mg/Serving Size
Total Curcuminoids	56.4 mg/Serving Size

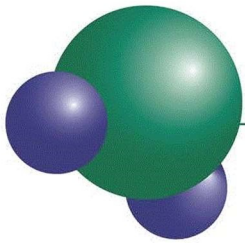
Method References	Testing Location
Calculated Sample Weight (PREP_BREA)	Food Integrity Innovation-Brea
Determination of Total Curcuminoids in Turmeric Products by UPLC (OC_CURC_S) Internally Developed Method	Food Integrity Innovation-Brea

Testing Location(s)	Released on Behalf of Eurofins by
Food Integrity Innovation-Brea	Robert Grahn - Manager

Eurofins Food Chemistry Testing US, Inc.  
2951 Saturn Street  
Unit C  
Brea CA 92821  
800-675-8375

Eurofins Food Integrity and Innovation accepts all liability for work conducted as of 01 Aug 2018.

These results apply only to the items tested. This certificate of analysis shall not be reproduced, except in its entirety, without the written approval of Eurofins.



**Analytical Report**  
April 10, 2019

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

Page 1 of 1  
WO Number: W19D0323

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

Customer PO: MH04052019  
Date Received: 4/8/2019  
Date Completed: 04/10/2019  
Discard Date: 04/24/2019

**CSL#: 19D0787 Boron with Curcuwin - Lot#: 47160/ A9000**

Parameter	Result	PQL	Method	Date	Analyst
Arsenic	<0.050 ug/g	0.050	ICP MS	04/09/19	CEN
Boron	11,000 ug/g	130	ICP MS	04/09/19	JTG
Cadmium	<0.050 ug/g	0.050	ICP MS	04/09/19	CEN
Lead	<0.050 ug/g	0.050	ICP MS	04/08/19	KMS
Mercury	<0.050 ug/g	0.050	ICP MS	04/09/19	CEN

**CSL#: 19D0787**

Parameter	Result	Serving Size	Unit Weight	Specification
Arsenic	<0.05 ug/g	1 Capsule	0.68 g	<0.50 ug/g
Boron	7 mg/cap	1 Capsule	0.68 g	6 mg/Capsule
Cadmium	<0.05 ug/g	1 Capsule	0.68 g	<0.50 ug/g
Lead	<0.05 ug/g	1 Capsule	0.68 g	<0.50 ug/g
Mercury	<0.05 ug/g	1 Capsule	0.68 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.



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Web: www.aemtek.com

**Project Description:** Product Testing (PO # MH04052019)  
**Report Issued To:** Allergy Research Group  
2300 North Loop  
Alameda, CA 94501  
**Contact:** Janice Vu

### Certificate of Analysis

**AEMTEK #: 1904420**

**Sampling Date:** 2019-04-05  
**Sample Received:** 2019-04-08  
**Analysis Started:** 2019-04-08  
**Analysis Performed By:** TD, MM, WY, EL  
**Report Issue Date:** 2019-04-11

Sample ID	Analyte	Aerobic Plate Count	Total Coliforms	Yeast	Mold	Escherichia coli	Salmonella	Staphylococcus aureus
2	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 Description	Lot #/Code						
	Borin with CurcuWIN	47160/ A9000						
<b>RESULTS</b>								
		<10	<10	<10	<10	ND	ND	ND

**Terminology:**  
CFU = Colony Forming Units  
< 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  
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.

N/A = Not Applicable or not analyzed

*Handwritten signature*