

Title: TMG Trimethylglycine, 100 Vegetarian Capsules	
Allergy Research Group® / NutriCology®	
Document No.: 73230CA	Revision: 011

Certificate of Analysis

Part Number	73230		
Lot Number	57430		
Product Count & Form	100 Vegetarian Capsules		
Packaging, Closure	225 cc bottle, desiccant, rayon/cotton		
Storage Condition	Room Temperature		
Shelf Life	36 months	Expiration Date	12/2022
Label Number, Size	73230L, H		
Retain Sample	1 bottle per label (2 bottles total)		

ANALYSIS

Physical

Attribute	Method / SOP	Specification	Test Result
Product Color & Size	SOP 515	White, clear size "00"	Complies
Product Weight Variation	SOP 514	Meet USP <2091> 900- 1010 mg	Pass, 924.0 mg
Disintegration Time	SOP 522	Meet USP <2040>	Passes; 3 mins

‡ Per manufacturer's Certificate of Analysis

Purity/Strength per Capsule

Active Ingredients	Label Claim	Release Limits	Test Result
Betaine Anhydrous (Trimethylglycine)	750 mg	100 - 150% of LC by CE	782.4 mg

*Production and Process control

Identification \ Chemical \ Heavy Metals

Attribute	Method / SOP	Specification	Test Result
Identity	Bulk Certificate of Analysis Review	Approved	Complies
Identity	Near Infrared Spectrometry	Matches Reference	Complies
Arsenic (inorganic)	ICP-MS per USP <2232>	≤ 15 µg/day Ψ	BQL
Cadmium	ICP-MS per USP <2232>	≤ 5 µg/day Ψ	BQL
Mercury	ICP-MS per USP <2232>	≤ 15 µg/day Ψ	BQL
Lead	ICP-MS per USP <2232>	≤ 10 µg/day Ψ	BQL

Ψ Permitted Daily Exposure, BQL - Below Quantification Limits

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Microbiology

Attribute	Method / SOP	Specification	Test Result
Total Aerobic Count	USP/ AOAC/ FDA BAM	$\leq 1 \times 10^4$ CFU/g	< 10 CFU/g
Total Yeast & Mold	USP/ AOAC/ FDA BAM	$\leq 1 \times 10^3$ CFU/g	< 10 CFU/g
Coliform	USP/ AOAC/ FDA BAM	$\leq 1 \times 10^2$ CFU/g	< 3 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: 	Digitally signed by Kimberly Vennebush Date: 2020.04.07 15:20:44 -06'00'	Date: 07APR2020
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If you liked our service, please tell a friend. If you didn't, please tell us!

Test Certificate

Description: TMG
Sample ID: 83230/57430
Lot No:
Location:
Received: 3/9/2020
Completed: 3/13/2020

Client: Allergy Research Group
2300 N Loop Rd.
Alameda, CA 94502

Lab No: 190634-03

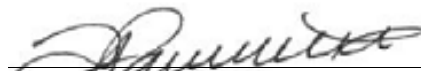
Analysis	Result	Per Unit	Specifications	Method
Total Aerobic Microbial Count	<10	CFU/g	<= 10,000 CFU/g	USP <2021>
Coliform	<3	MPN/g	<= 1,000 MPN/g	FDA BAM
E Coli	<3	MPN/g	Absent	FDA BAM
Salmonella	Absent	per 10 grams	Absent	USP <2022>
Staphylococcus aureus	Absent	per 10 grams	Absent	USP <2022>
Total Yeast & Mold	<10	CFU/g	<= 1,000 CFU/g	USP <2021>
Yeast *	<10	CFU/g	<= 1,000 CFU/g	
Mold *	<10	CFU/g	<= 1,000 CFU/g	

FDA BAM Method Utilized: 10g sample size

THESE RESULTS APPLY ONLY TO THE SAMPLE SUBMITTED AND NOT TO THE PRODUCT FROM WHICH IT WAS TAKEN. THESE RESULTS ARE PROVIDED ONLY FOR THE BENEFIT OF CLIENT, WITHOUT REPRESENTATION OR WARRANTY OF ANY KIND, EXCEPT FOR THE EXPRESS LIMITED WARRANTY PROVIDED SOLELY TO CLIENT IN ADVANCED LABORATORIES' TERMS OF SERVICE.

THIS CERTIFICATE SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL FROM ADVANCED LABORATORIES.

Results Approved By:


Alisa Farnsworth-Quality Technician

Dated:

3/13/2020

Printed: 3/13/2020 8:41:12 PM



If you liked our service, please tell a friend. If you didn't, please tell us!

Test Certificate

Description: TMG
Sample ID: 83230/57430
Lot No:
Location:
Received: 3/9/2020
Completed: 3/17/2020

Client: Allergy Research Group
2300 N Loop Rd.
Alameda, CA 94502

Lab No: 190640-03

Analysis	Result	Per Unit	Specifications	Method
Mercury	0.003	µg/g	< 0.5 µg/g	ICP-MS USP <730>
Lead	0.009	µg/g	< 0.5 µg/g	ICP-MS USP <730>
Arsenic	0.073	µg/g	< 0.5 µg/g	ICP-MS USP <730>
Cadmium	<0.001	µg/g	< 0.5 µg/g	ICP-MS USP <730>
† Trimethylglycine	782.4	mg/ Capsule	>= 750 mg/ Capsule	HPLC

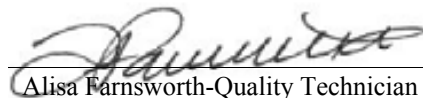
FDA BAM Method Utilized: 10g sample size

Trimethylglycine analysis performed using HPLC following derivatization according to the AccQtag methodology (Waters, Inc.) using 20 mM HCl, Borate buffer, and AQC reagent in acetonitrile (1:3:1, v/v/v), followed by HPLC using Waters Extera C18 column (150x3.5mm, 3µm), 40°C, with isocratic mobile phase consisting of 20mM Potassium phosphate, pH3.0/Acetonitrile (95:5) 1.5ml/min with UV detection (254nm). Authentic chemical reference material obtained from Sigma-Aldrich.

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Results Approved By:


Alisa Farnsworth-Quality Technician

Dated:

3/17/2020

Tests marked with † were done at Atlas Bioscience Labs, LLC, a joint venture with Advanced Laboratories. -
1775 S. Pantano Rd - Ste #110, Tucson, AZ 85710

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