# Title: L-Ornithine-L-Aspartate, 100 grams Powder

Allergy Research Group® / NutriCology®

Document No.: 76100CA Revision: 005

## **Certificate of Analysis**

| Part Number                     | 76100                             |  |  |  |  |
|---------------------------------|-----------------------------------|--|--|--|--|
| Lot Number                      | 0820005                           |  |  |  |  |
| <b>Product Count &amp; Form</b> | 100 grams (3.5 oz) powder         |  |  |  |  |
| Packaging, Closure              | 250cc Amber glass bottle          |  |  |  |  |
| <b>Storage Condition</b>        | Room Temperature                  |  |  |  |  |
| Shelf Life                      | 36 months Expiration Date 08/2023 |  |  |  |  |
| Label Number, Size              | 76100L, H                         |  |  |  |  |
| Retain Sample                   | 2 bottles total                   |  |  |  |  |

#### **ANALYSIS**

#### **Physical**

| Attribute            | Method / SOP | Specification               | Test Result |
|----------------------|--------------|-----------------------------|-------------|
| Product Color        | QC011        | White, crystalline powder   | Complies    |
| Product Odor / taste | QC011        | Characteristic Odor / taste | Complies    |

### **Purity**

| Attribute                        | Method / SOP            | Specification | Test Result |
|----------------------------------|-------------------------|---------------|-------------|
| Ornithine & Aspartic acid (free) | Free amino acids (HPLC) | > 97.5 %      | 97.9%       |

<sup>\*</sup>Production and Process Control

#### **Identification \ Chemical \ Heavy Metals**

| Attribute       | Method / SOP                                | Specification     | Test Result   |
|-----------------|---|-------------------|---------------|
| Identity        | Raw Material Certificate of Analysis Review | Approved          | Complies      |
| Identity        | Near Infrared Spectroscopy                  | Matches Reference | Complies      |
| Arsenic         | 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     | 0.090 mcg/day |
| Lead            | ICP-MS per USP <2232>                       | ≤10 mcg/day Ψ     | 0.906 mcg/day |

<sup>\*</sup>Production and Process Control, BQL – Below Quantitation Level,  $\Psi$  – Permitted Daily Exposure

#### Microbiology

| Attribute            | Method / SOP       | Specification                      | Test Result   |
|----------------------|--------------------|------------------------------------|---------------|
| Total Aerobic Count  | USP/ AOAC/ FDA BAM | $\leq 1 \times 10^3 \text{ CFU/g}$ | <10 CFU/g     |
| Total Yeast & Mold   | USP/ AOAC/ FDA BAM | $\leq 1 \times 10^2 \text{ CFU/g}$ | <10 CFU/g     |
| Coliform             | USP/ AOAC/ FDA BAM | $\leq 1 \times 10^2 \text{ CFU/g}$ | <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 |

<sup>\*</sup>Production and process control

Approval: Casey Van Wagoner 2020.09.11 12:05:39 -06'00' Date: 11SEP2020

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40 West Louise Ave., Salt Lake City, UT 84115 Phone: (801) 485-1800 Fax: (801) 484-9211

Email: utlab@advancedlabsinc.com FDA Registration #14353128308

# **Test Certificate**

Description: L-ornithine L-Aspartate Client: Allergy Research Group

2300 S Main St

Lot No: 0820005 Salt Lake City, UT 84115

Location:

Sample ID:

Received: 8/24/2020 Completed: 8/31/2020

86100

Lab No: 201947-01

| Analysis                      | Result  | Per Unit     | Specifications  | Method           |
|-------------------------------|---------|--------------|-----------------|------------------|
| Mercury                       | 0.015   | μg/g         | < 0.5 μg/g      | ICP-MS USP <730> |
| Lead                          | 0.151   | $\mu g/g$    | $< 0.5 \mu g/g$ | ICP-MS USP <730> |
| Arsenic                       | < 0.001 | $\mu g/g$    | $< 0.5 \mu g/g$ | ICP-MS USP <730> |
| Cadmium                       | < 0.001 | $\mu g/g$    | $< 0.5 \mu g/g$ | ICP-MS USP <730> |
| Total Aerobic Microbial Count | <10     | CFU/g        | <= 1,000 CFU/g  | USP <2021>       |
| Coliform                      | <10     | CFU/g        | <= 100 CFU/g    | AOAC 991.14      |
| E.Coli                        | Absent  | per 10 grams | Absent          | USP <2022>       |
| Staphylococcus aureus         | Absent  | per 10 grams | Absent          | USP <2022>       |
| Salmonella                    | Absent  | per 10 grams | Absent          | USP <2022>       |
| Total Yeast & Mold            | <10     | CFU/g        | <= 100 CFU/g    | USP <2021>       |
| Yeast *                       | <10     | CFU/g        | <= 100 CFU/g    | USP <2021>       |
| Mold *                        | <10     | CFU/g        | <= 100 CFU/g    | USP <2021>       |

<sup>\*</sup> For informational purposes only.

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:

Kristina Nolff-Quality Technician

**Dated:** 8/31/2020

Printed: 8/31/2020 4:36:48 PM





## 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, LLC

Address:

2300 North Loop Road Alameda, CA 94502

#### ANALYTICAL/CHEMICAL CERTIFICATE OF ANALYSIS

Sample Name: L-ORNITHINE L-ASPARTATE

Product Code: 86100 Batch/Lot: 0820005

MQL Accession: 200824-0162

PO#: 77945-21

Sample Description: FG

Rush: N/A

Received Date: 08/24/20

| Test Requested:          | Test Method: | Specification: | Results: |
|--------------------------|--------------|----------------|----------|
| L-Ornithine- L-Aspartate | MQLTM-0194   | NLT 97.5%      | 97.9%    |
|                          | By HPLC      |                |          |

Prepared By:

Diana Zavala/Document Control Specialist

Reviewed By:

Andrea Orozco/Quality Assurance Supervisor

SEP 0 8 2020

09/08/20

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09/08/20

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.

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