



thrivous.com – support@thrivous.com – +1 801 658 9661 – PO Box 4078 #73216, SLC UT 84110 USA

CERTIFICATE OF ANALYSIS AND QUALITY

| | |
|---------|-------------------------|
| Product | Clarity Daily Nootropic |
| SKU | CLARITY |
| Barcode | 866033000208 |
| Formula | 4 |
| Date | 6 April 2023 |

Label

Warning: Consult a physician before and during use of all dietary supplements.

Use: Take 2 capsules up to 2 times daily with meals, for a total of 2 to 4 capsules daily.

Storage: Keep cool and dry, away from children.



Synapsa is a trademark of Soho Flordis International Pty Ltd., exclusively licensed in the United States to PLT Health Solutions, Inc.

* THIS STATEMENT HAS NOT BEEN EVALUATED BY THE FOOD AND DRUG ADMINISTRATION. THIS PRODUCT IS NOT INTENDED TO DIAGNOSE, TREAT, CURE, OR PREVENT ANY DISEASE.



CLARITY DAILY NOOTROPIC

Formula 4

Enhances Memory, Focus, and Mood,
and Supports Healthy Brain Function*

Dietary Supplement
60 CAPSULES

Supplement Facts

Serving Size 2 Capsules
Servings Per Container 30

| Amount Per Serving | % Daily Value |
|--|---------------|
| Thiamin (Thiamin Hydrochloride) 25 mg | 2080% |
| Riboflavin (Riboflavin 5 Phosphate) 25 mg | 1920% |
| Niacin (Nicotinamide) 100 mg | 620% |
| Vitamin B6 (Pyridoxal 5 Phosphate) 25 mg | 1470% |
| Folate (L 5 Methyltetrahydrofolate) 400 mcg | 100% |
| Vitamin B12 (MeCbl and AdoCbl) 240 mcg | 10000% |
| Biotin (D Biotin) 300 mcg | 1000% |
| Pantothenic Acid (D Calcium Pantothenate) 100 mg | 2000% |
| Zinc (from Zinc Picolinate) 11 mg | 100% |
| Bacopa Monnieri Extract (Synapsa® 55% Bacoside) 320 mg † | |
| L Theanine 200 mg | † |
| Rhodiola Rosea Root Extract (2% Salidroside) 170 mg | † |

† Daily Value Not Established

Other Ingredients: Cellulose, Canola Oil, Stearic Acid, Silicon Dioxide
THRIVOUS, PO BOX 4078 #73216, SLC UT 84110 USA

| Certifications |
|---|
| Letter of Guarantee |
| Good Manufacturing Practice (GMP) Certificate from Manufacturing |
| National Sanitation Foundation (NSF) Certificate from Manufacturing |
| ISO/IEC 17025 Certificate from Third-Party Testing |
| Certificate of Analysis from Third-Party Testing |
| Capsule Certificate of Analysis from Supplier |
| Capsule Certificate of Analysis from Third-Party Testing |
| Excipient Canola Oil Certificate of Analysis from Third-Party Testing |
| Excipient Silicon Dioxide Certificate of Analysis from Supplier |
| Excipient Silicon Dioxide Certificate of Analysis from Third-Party Testing |
| Excipient Stearic Acid Certificate of Analysis from Supplier |
| Excipient Stearic Acid Certificate of Analysis from Third-Party Testing |
| Bacopa Monnieri Certificate of Analysis from Supplier |
| Bacopa Monnieri Certificate of Analysis from Third-Party Testing |
| L Theanine Certificate of Analysis from Supplier |
| L Theanine Certificate of Analysis from Third-Party Testing |
| Rhodiola Rosea Certificate of Analysis from Supplier |
| Rhodiola Rosea Certificate of Analysis from Third-Party Testing |
| Vitamin B1 Thiamin Hydrochloride Certificate of Analysis from Supplier |
| Vitamin B1 Thiamin Hydrochloride Certificate of Analysis from Third-Party Testing |

| |
|--|
| Vitamin B2 Riboflavin 5 Phosphate Certificate of Analysis from Supplier |
| Vitamin B2 Riboflavin 5 Phosphate Certificate of Analysis from Third-Party Testing |
| Vitamin B3 Nicotinamide Certificate of Analysis from Supplier |
| Vitamin B3 Nicotinamide Certificate of Analysis from Third-Party Testing |
| Vitamin B5 Calcium Pantothenate Certificate of Analysis from Supplier |
| Vitamin B5 Calcium Pantothenate Certificate of Analysis from Third-Party Testing |
| Vitamin B6 Pyridoxal 5 Phosphate Certificate of Analysis from Supplier |
| Vitamin B6 Pyridoxal 5 Phosphate Certificate of Analysis from Third-Party Testing |
| Vitamin B7 Biotin Certificate of Analysis from Supplier |
| Vitamin B7 Biotin Certificate of Analysis from Third-Party Testing |
| Vitamin B9 L 5 Methyltetrahydrofolate Certificate of Analysis from Supplier |
| Vitamin B9 L 5 Methyltetrahydrofolate Certificate of Analysis from Third-Party Testing |
| Vitamin B12 Adenosylcobalamin Certificate of Analysis from Supplier |
| Vitamin B12 Adenosylcobalamin Certificate of Analysis from Third-Party Testing |
| Vitamin B12 Methylcobalamin Certificate of Analysis from Supplier |
| Vitamin B12 Methylcobalamin Certificate of Analysis from Third-Party Testing |
| Zinc Picolinate Certificate of Analysis from Supplier |
| Zinc Picolinate Certificate of Analysis from Third-Party Testing |



thrivous.com – support@thrivous.com – +1 801 658 9661 – PO Box 4078 #73216, SLC UT 84110 USA

6 April 2023

RE: Letter of Guarantee for Thrivous Clarity Daily Nootropic

To whom it may concern,

The undersigned, Lincoln Cannon LLC DBA Thrivous (“Thrivous”), hereby guarantees as follows regarding Clarity Daily Nootropic (“Product”):

1. Product is manufactured according to current Good Manufacturing Practices as indicated in 21 CFR Part 111.
2. Product is tested by third party laboratories according to current best practices as indicated in ISO/IEC 17025.
3. All ingredients utilized for Product are lawful and safe as defined in section 402(f) of the FD&C Act.
4. To the best of Thrivous’ knowledge, concentrations of active ingredients, as stated on the label of Product, are safe for consumption.

Thrivous further guarantees that any agent signing on behalf of Thrivous has the authority to bind and obligate Thrivous.

Lincoln Cannon LLC DBA Thrivous

Lincoln Cannon
CEO at Thrivous



State of Utah
SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

Department of Agriculture and Food

Craig W. Buttars
Commissioner

Kelly Pehrson
Deputy Commissioner

Travis Waller
Director, Regulatory Services

Certificate No.: REG-2021-12022

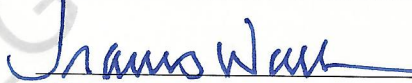
GOOD MANUFACTURING PRACTICE CERTIFICATE

We hereby certify that ORIGIN NUTRACEUTICAL INC, located at, 151 E 3450 N, SPANISH FORK, UT 84660 is currently under inspection as a manufacturer of health food or dietary supplements. ORIGIN NUTRACEUTICAL INC has all the facilities to comply with the GOOD MANUFACTURING PRACTICE for food and dietary supplements (Code of Good Manufacturing Practice for food).

We also certify that ORIGIN NUTRACEUTICAL INC, is an inspected facility and the manufacturing plant in which their products are produced are subject to inspections at suitable intervals.

Inspection evaluates and assures compliance with the Utah Wholesome Food Act and Utah Food Protection Rule, which identifies the standard for proper facility construction, good manufacturing practices for food and dietary supplements (GMP), and fulfills requirements of those applicable laws and rules in the State of Utah.

UTAH DEPARTMENT OF AGRICULTURE AND FOOD



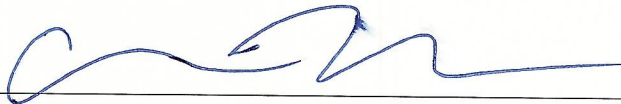
Division of Regulatory Services

State of Utah, County of Salt Lake.

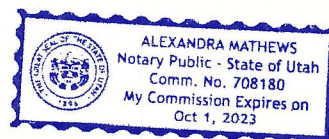
On this date DEC 20 2021 before me, the notary, personally appeared

Travis Waller, proved on the basis of satisfactory

evidence to be person, whose name is subscribed to this document, and acknowledge that he/she executed the same.



Notary Public





NSF INTERNATIONAL

789 N. Dixboro Road, Ann Arbor, Michigan 48105 USA
+1 800 673 6275



GMP Registered
Dietary Supplements

NSF International has assessed and confirmed compliance of

Origin Nutraceutical, Inc.

Facility: 151 East 3450 North, Spanish Fork, UT, 84660, United States

to NSF GMP Registration Program Requirements of NSF/ANSI 173, Section 8

which includes FSMA and cGMP (21 CFR 111), (21 CFR 117)

Print Date: May 23, 2022
Certificate Number: C0570236-DS-2
Initial Certification: February 22, 2021
Expiration Date: May 23, 2023

David Trosin
Senior Director Global Certification,
Health Sciences



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

Contract Testing Laboratories of America

151 E. 3450 N., Spanish Fork, UT 84660

*(Hereinafter called the Organization) and hereby declares that Organization is accredited
in accordance with the recognized International Standard:*

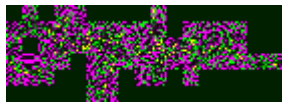
ISO/IEC 17025:2017

This accreditation demonstrates technical competence for a defined scope and the
operation of a laboratory quality management system
(as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Biological Testing
(As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:



Tracy Szerszen
President

Perry Johnson Laboratory
Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

Initial Accreditation Date:

March 31, 2021

Issue Date:

March 31, 2021

Expiration Date:

June 30, 2023

Accreditation No.:

102267

Certificate No.:

L21-216

*The validity of this certificate is maintained through ongoing assessments based on a
continuous accreditation cycle. The validity of this certificate should be
confirmed through the PJLA website: www.pjilabs.com*



Certificate of Accreditation: Supplement

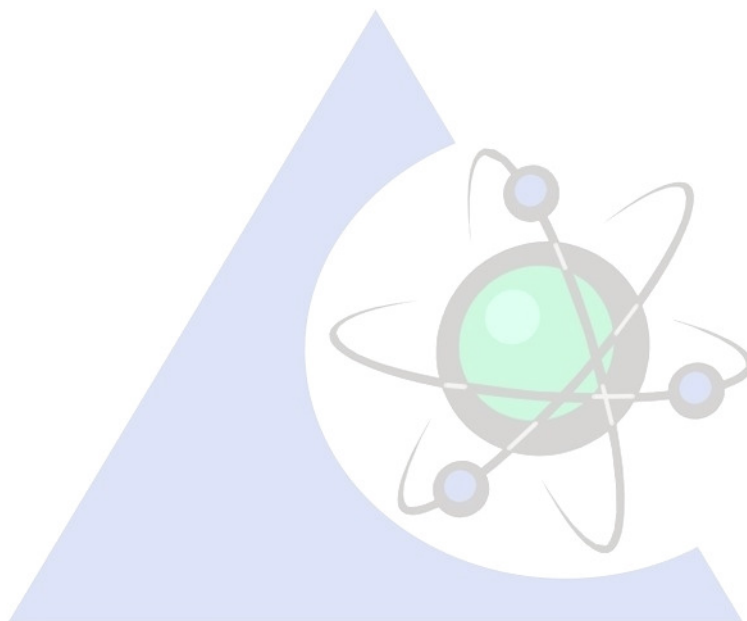
Contract Testing Laboratories of America

151 E. 3450 N., Spanish Fork, UT 84660
Contact Name: Rachael Cummings Phone: 385-477-4999

Accreditation is granted to the facility to perform the following testing:

| FIELD OF TEST | ITEMS, MATERIALS OR PRODUCTS TESTED | SPECIFIC TESTS OR PROPERTIES MEASURED | SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED | RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT |
|-------------------------|-------------------------------------|---------------------------------------|--|--|
| Biological ^F | Food and Nutritional Supplements | Rapid E. Coli and Coliforms | AOAC OMA 2018.13 | Petri Film Incubators Positive/Negative <100 cfu/g or <10 cfu/g To TNTC |

1. The presence of a superscript F means that the laboratory performs testing of the indicated parameter at its fixed location. Example: Outside Micrometer^F would mean that the laboratory performs this testing at its fixed location.





Certificate of Analysis

| | | | |
|--------------------------|---|----------------------|-------------------------|
| CTLA ID | 69607 | Sample Name | Clarity Daily Nootropic |
| Customer | Thrivos | Lot Number | 2306101 |
| Date Received | 3/9/2023 | Date Complete | 3/20/2023 |
| Customer Address: | PO Box 4078 #73216, Salt Lake City, UT. 84110 | | |

| ANALYSIS | SPECIFICATION | RESULT | METHOD | MDL | UNITS |
|---|---------------|--------|--------------|-------|-------|
| Complete Rapid Micro | | | | | |
| Total Plate Count | Report | <100 | USP<2021> | 100 | cfu/g |
| Total Coliforms | Report | <10 | BAM CH.4 | 10 | cfu/g |
| <i>E. coli</i> | Report | Absent | USP<2022> | | |
| <i>Salmonella</i> | Report | Absent | USP<2022> | | |
| <i>S. aureus</i> | Report | Absent | USP<2022> | | |
| Rapid Yeast & Mold | Report | <10 | AOAC 2014.05 | 10 | cfu/g |
| Heavy Metal | | | | | |
| Arsenic | Report | 0.213 | USP <2232> | 0.001 | ppm |
| Cadmium | Report | 0.009 | USP <2232> | 0.001 | ppm |
| Mercury | Report | <0.001 | USP <2232> | 0.001 | ppm |
| Lead | Report | <0.001 | USP <2232> | 0.001 | ppm |
| Thiamin (Thiamin Hydrochloride) | Report | 25 | By Input | | mg |
| Riboflavin (Riboflavin 5 Phosphate) | Report | 25 | By Input | | mg |
| Niacin (Nicotinamide) | Report | 100 | By Input | | mg |
| Vitamin B6 (Pyridoxal 5 Phosphate) | Report | 25 | By Input | | mg |
| Folate (L-5 Methyltetrahydrofolate) | Report | 400 | By Input | | mcg |
| Vitamin B12 (MeCbl and AdoCbl) | Report | 240 | By Input | | mcg |
| Biotin(D Biotin) | Report | 300 | By Input | | mcg |
| Pantothenic Acid (D Calcium Pantothenate) | Report | 100 | By Input | | mg |
| Zinc (Zinc Picolinate) | Report | 11 | By Input | | mg |
| Bacopa Monnieri Extract (Synapsa® 55% Bacoside) | Report | 320 | By Input | | mg |
| Rhodiola Rosea Root Extract (2% Salidroside) | Report | 170 | By Input | | mg |
| Other ingredients: Cellulose, Canola Oil, Stearic Acid, Silcon Dioxide | | | | | |

COA Note:

Approved By:

Date:

3/20/2023



Specifications provided by the Customer. Results with an asterisk (*) denote Specification should be reviewed by the Customer. This Certificate of Analysis represents the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. The results are provided for the benefit of the Customer. Results using the "by input" method are calculated using information provided by the Customer. MDL = Method Detection Limit

151 E 3450 N, Ste 201
Spanish Fork, UT 84660
(385) 477-4999



ISO 17025 Accreditation No: 102267

Certificate of Analysis

Sample Information

CTLA ID: 69607
Date Received: 3/9/2023
Sample Name: 30054 Clarity Daily Nootropic
Lot Number: 2306101
Customer: Origin Nutraceutical

| Analysis | Method | MDL | Specification | Result | Units |
|-------------------------------------|--------------|-------|---------------|--------|-------|
| Rapid Complete Micro | | | | | |
| Total Plate Count | USP <2021> | 100 | Report | <100 | cfu/g |
| Total Coliforms | USP <2021> | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Report | Absent | |
| <i>Salmonella</i> | USP <2022> | | Report | Absent | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Report | Absent | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |
| Heavy Metals | | | | | |
| Arsenic | USP <233> | 0.001 | Report | 0.213 | ppm |
| Cadmium | USP <233> | 0.001 | Report | 0.009 | ppm |
| Mercury | USP <233> | 0.001 | Report | <0.001 | ppm |
| Lead | USP <233> | 0.001 | Report | <0.001 | ppm |
| Amazon document fee | | | Report | | |

3/20/2023

DATE

Quality Manager

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456 Silver Creek Industrial Drive, TECUMSEH, ONTARIO N8N 4Y3 Tel:(519) 727-4618; Fax:(519)727-4619

CERTIFICATE OF ANALYSIS

EMPTY HARD CAPSULES OF VEGETABLE ORIGIN

| | | |
|--|-------------------------------|-----------------------|
| LOT No.: <u>K2207001182</u> | PRODUCT CODE: <u>KC0-1000</u> | SIZE: <u>0</u> |
| CAPSULE COLOR: <u>CAP - NATURAL 1-0K</u> | / BODY - <u>NATURAL 1-0K</u> | |
| PRINT: <u>N/A</u> | TEXT: <u>N/A</u> | INK COLOR: <u>N/A</u> |

CapsCanada® capsules are preservative free and manufactured under strict cGMP conditions. All empty capsules are manufactured from pharmaceutical cellulose ethers, which are polymers derived from vegetable sources. Cellulose used to manufacture empty hard capsules of vegetable origin by CapsCanada® meet the current USP/NF and EP requirements. CapsCanada® may blend pharmaceutical cellulose.

(% Ingredients to % Cellulose)

| Cap | % | Body | % |
|-----|---|------|---|
| | | | |

Due to the nature of the raw materials and technology improvements, the color formulation represents target values only. The actual values may differ slightly to ensure the consistency of the finished product.

Date of Manufacture: 2022-07

Expiration Date: 2027-07

| CRITERIA | METHOD / REFERENCE | SPECIFICATIONS | RESULTS |
|-------------------------------|-------------------------|--|---------|
| ORGANOLEPTIC | | | |
| Physical Form | Internal / Visual | Clean empty capsule shells meeting the specified color and size | Passes |
| Color | | Meets the specified requirements | Passes |
| Odor | Internal / Organoleptic | Typical - Cellulose | Passes |
| PHYSICAL | | | |
| Visual Defects | Internal / Visual | Conforms to the established AQLs | Passes |
| Average Capsule Weight | Internal | 101.0 - 113.0 mg | 107.0 |
| Loss on drying | USP | 4.0% - 8.0% | 4.5 |
| Disintegration | USP | N.M.T. 15 min | Passes |
| ANALYTICAL | | | |
| Identification of HPMC | USP | Meets USP Requirements | Passes |
| Residue on Ignition * | USP | N.M.T. 1.5% Transparent capsules N.M.T. 6.0% colored capsules | Passes |
| Arsenic * | USP (External) | N.M.T. 0.8 ppm | Passes |
| Cadmium * | USP (External) | N.M.T. 0.5 ppm | Passes |
| Lead * | USP (External) | N.M.T. 0.5 ppm | Passes |
| Mercury * | USP (External) | N.M.T. 0.1 ppm | Passes |
| Cobalt * | USP (External) | N.M.T. 5.0 ppm | Passes |
| Vanadium * | USP (External) | N.M.T. 10.0 ppm | Passes |
| Nickel * | USP (External) | N.M.T. 20.0 ppm | Passes |
| Total Aerobic Microbial Count | USP | N.M.T. 1000 cfu/g | <10 |
| Total Yeasts and Molds count | USP | N.M.T. 100 cfu/g | <10 |
| Salmonella | USP | Absence in 10 g | Absence |
| Escherichia Coli | USP | Absence in 1g | Absence |
| Staphylococcus aureus | USP | Absence in 1g | Absence |
| Pseudomonas aeruginosa | USP | Absence in 1g | Absence |

Capsules are certified as Kosher and Halal.

Storage Conditions: Temperature: 15°C - 30°C Relative Humidity: 35% - 70% RH

*Reduced Frequency Testing.

N.M.T. = No More Than


 Quality Control

Date: 2022-08-10

EDITION No: 1

Code: DCC-032E (Effective from July 1st, 2020)

Version 4

Certificate of Analysis

Sample Information

CTLA ID: 61533
 Date Received: 11/1/2022
 Sample Name: 10449 Capsule, HPMC, 0, Clear, K-Cup
 Lot Number: 45148
 Customer: Origin Nutraceutical

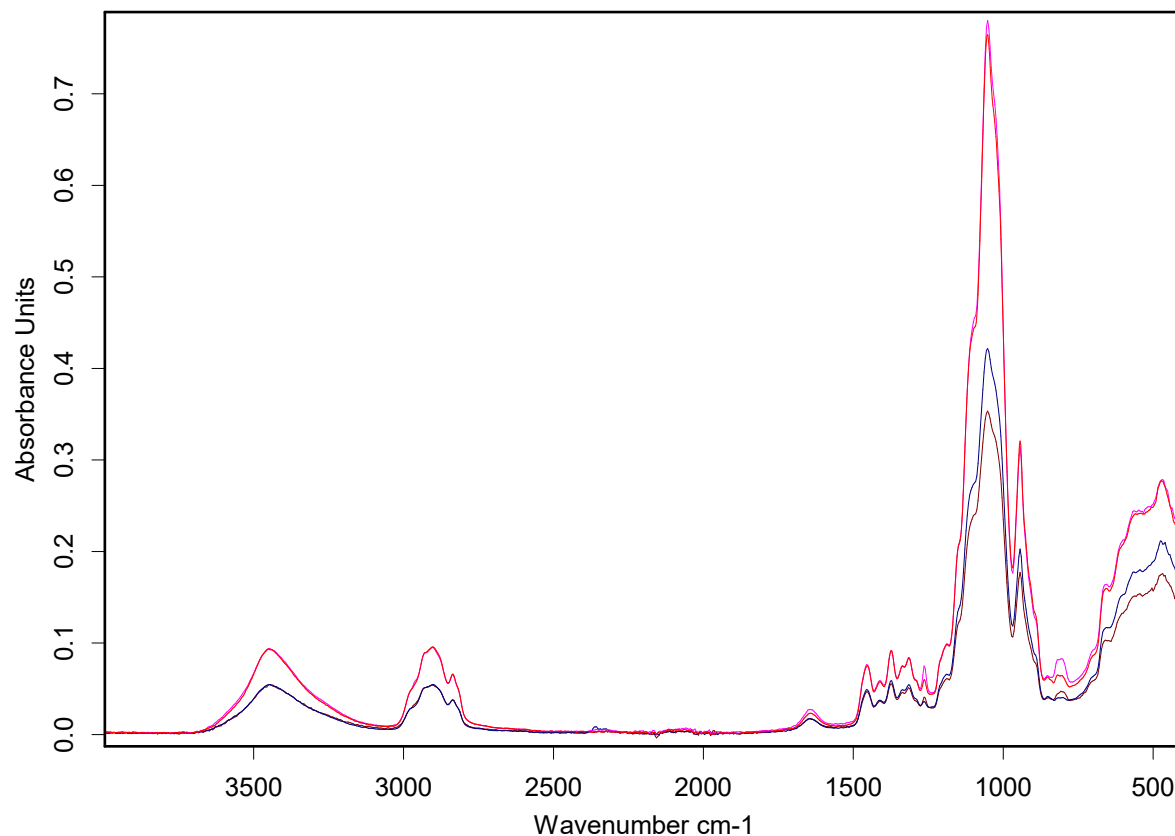
| Analysis | Method | MDL | Specification | Result | Units |
|-------------------------------------|--------------|-----|---------------|----------|-------|
| Rapid Complete Micro | | | | | |
| Total Plate Count | USP <2021> | 100 | Report | 900 | cfu/g |
| Total Coliforms | USP <2021> | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | | Report | Negative | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Report | Negative | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |

11/3/2022
DATE



Quality Manager

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| | |
|---------------------|---------------------------------------|
| Product Number | 10449 OK Capsule HPMC 1812 Standard 2 |
| Entry No. | 647 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|---|------------|-------------------|------------------|
| | 983 | 10449 CPS O K-Cap HPMC 12092 Standard 3 | | | |
| | 915 | 10449 O-K-Cap HPMC 1004 Standard 1 | | | |
| | 914 | 10449 OK Capsule HPMC 1812 Standard 2 | | | |

| Color | File | Path | Spectrum Type |
|-------|---|--|----------------|
| | 65289-ON 10449 CPS Capsule HPMC 0 Clear K-Cap (45148) | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS | Query Spectrum |

Certificate of Analysis

Sample Information

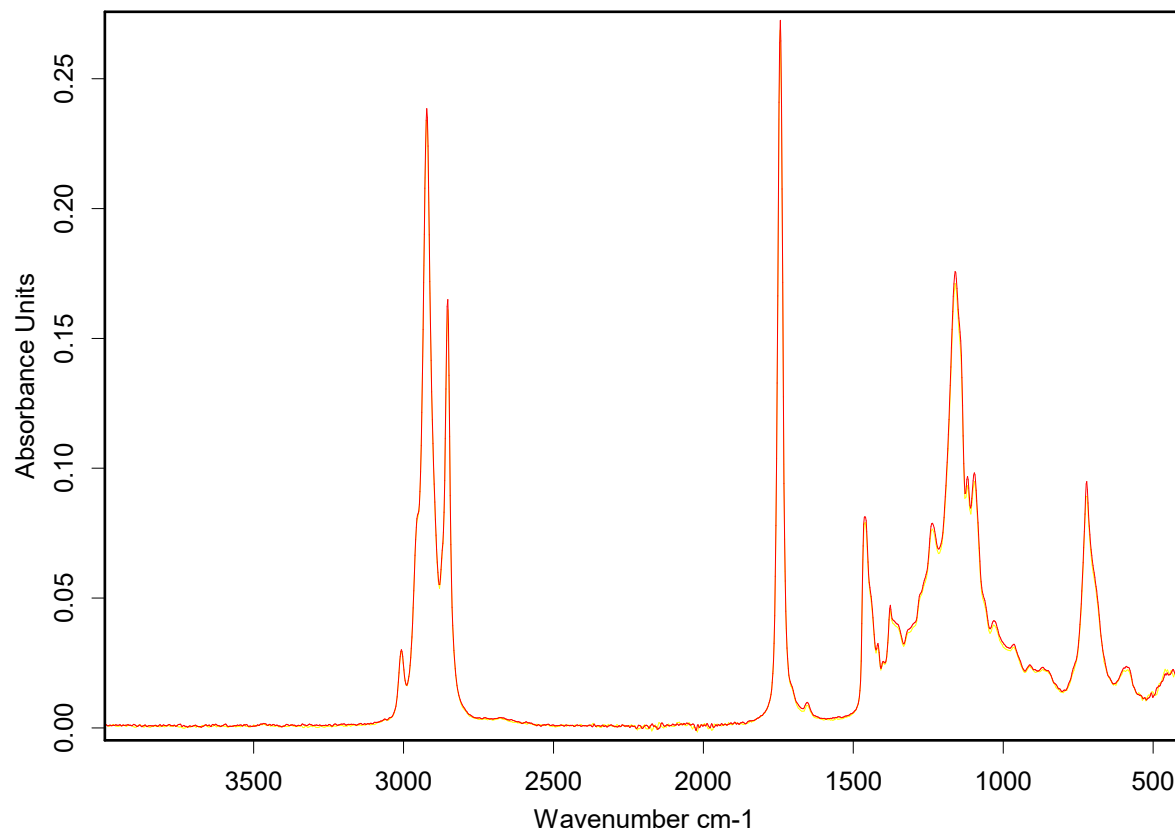
CTLA ID: 61532
Date Received: 11/1/2022
Sample Name: 10031 Canola Oil
Lot Number: 45134
Customer: Origin Nutraceutical

| Analysis | Method | MDL Specification | Result | Units |
|-------------------------------------|--------------|-------------------|----------|-------|
| ID, Rapid Complete Micro Combo | | | | |
| ID | FTIR | Report | 98.8 | % |
| Total Plate Count | USP <2021> | 100 Report | <100 | cfu/g |
| Total Coliforms | USP <2021> | 10 Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | Report | Negative | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | Report | Negative | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 Report | <10 | cfu/g |

11/3/2022
DATE


Quality Manager

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| | |
|---------------------|---------------------------------------|
| Product Number | 10031 LIQ Canola Oil 13099 Standard 2 |
| Entry No. | 1499 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|---------------------------------------|------------|-------------------|------------------|
| | 988 | 10031 LIQ Canola Oil 13099 Standard 2 | | | |

| Color | File | Path | Spectrum Type |
|-------|---|--|----------------|
| | 61532-ON 10031 LIQ Canola Oil (45134).0 | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS | Query Spectrum |

Evonik Corporation - 299 Jefferson Road - Parsippany, NJ 07054-0677

VIVION INC. - VERNON
 3000 EAST 46TH STREET
 VERNON CA 90058

 Proudly Supplied By: Vivion, Inc.
 929 Bransten Road, San Carlos, CA 94070
 Phone: (650) 595-3600, Fax: (650) 595-2094

**Inspection Certificate 3.1
 according to EN 10204**

| | |
|------------------------|-----------------------------|
| Date | Nov 1, 2021 |
| Delivery Number / Item | 3007838922 / 000001 |
| Order Number / Item | 2004842408 / 000001 |
| Date | Aug 23, 2021 |
| Silica | |
| Contact Person | Martinez Jasmine |
| Mail | jasmine.martinez@evonik.com |
| Customer no. | 7250020313 |
| Fax | +16505952094 |
| Your purchase order | 4700100907 |
| Date | Aug 23, 2021 |

| | |
|-----------------------|--|
| Product | SIPERNAT® 22 S 15 x 11.34 KG / 25.00 lbs Paper Bag 5M1 / Hardwood pallet |
| Material | 99002421 |
| Customer material no. | 25920-25LB / 3919202 110 01M |
| Quantity | 810 BAG |
| Batch | 311092711 |
| Production date | Sep 27, 2021 |
| Best before | Sep 26, 2023 |
| Delivery date | Oct 28, 2021 |
| Spec.No. | 4529 / 1; K00 |

Delivery date = Estimated time of dispatch / departure

| Property | Test method | Unit | Value | Specification | |
|--------------------------------|---------------------|----------|-------|---------------|------|
| | | | | Min. | Max. |
| pH value, 5% in water | following ISO 787-9 | | 6.5 | 6.0 | 8.0 |
| Loss on drying, 2h at 105°C | per ISO 787-2 | % | 5.1 | | 7.0 |
| Sieve residue, 45 µm, spray | fol. ISO 3262-19 | % | < 0.1 | | 1.5 |
| BET Multipoint surface area N2 | following ISO 9277 | m²/g | 170 | 160 | 200 |
| DOA absorption Orig subst. | ISO 19246 | ml/100 g | 239 | 215 | 255 |
| Part. Size d50, Coulter LS230 | fol. ISO 13320-1 | µm | 11.7 | 10.0 | 14.0 |

**Contract Testing Laboratories of America**

Email: cs@ctltesting.com

Phone: (385) 477-4999

ISO/IEC 17025:2017 102267

FDA Registration #: 10849021016

DEA #:12170754-1714, 12170754-8915

Certificate of Analysis**Client Name:** Origin Nutraceutical**Sample ID:** 65167**Address:** 151 E 3450 N
Spanish Fork, UT 84660**Sample Type:****Date Recieved:** 09/23/2022**Sample Name:** 10030 EXC Silicon Dioxide,
Precipitated**Date Completed:** 09/28/2022**Lot Number:** 41097**COA Notes:****Chemistry Category****FTIR Spectra**

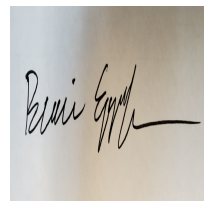
| Test | Method | MDL | Specification | Result | Units |
|--------------|--------|-----|---------------|--------|-------|
| FTIR Spectra | FTIR | | Report | 96.3 | |

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit. OOS = Out of Specification. Alteration of this Certificate of Analysis is prohibited and will render the Certificate void. CTLA is the testing laboratory for the manufacturer. In case of product questions, please contact the manufacturer directly.

Microbiology Category

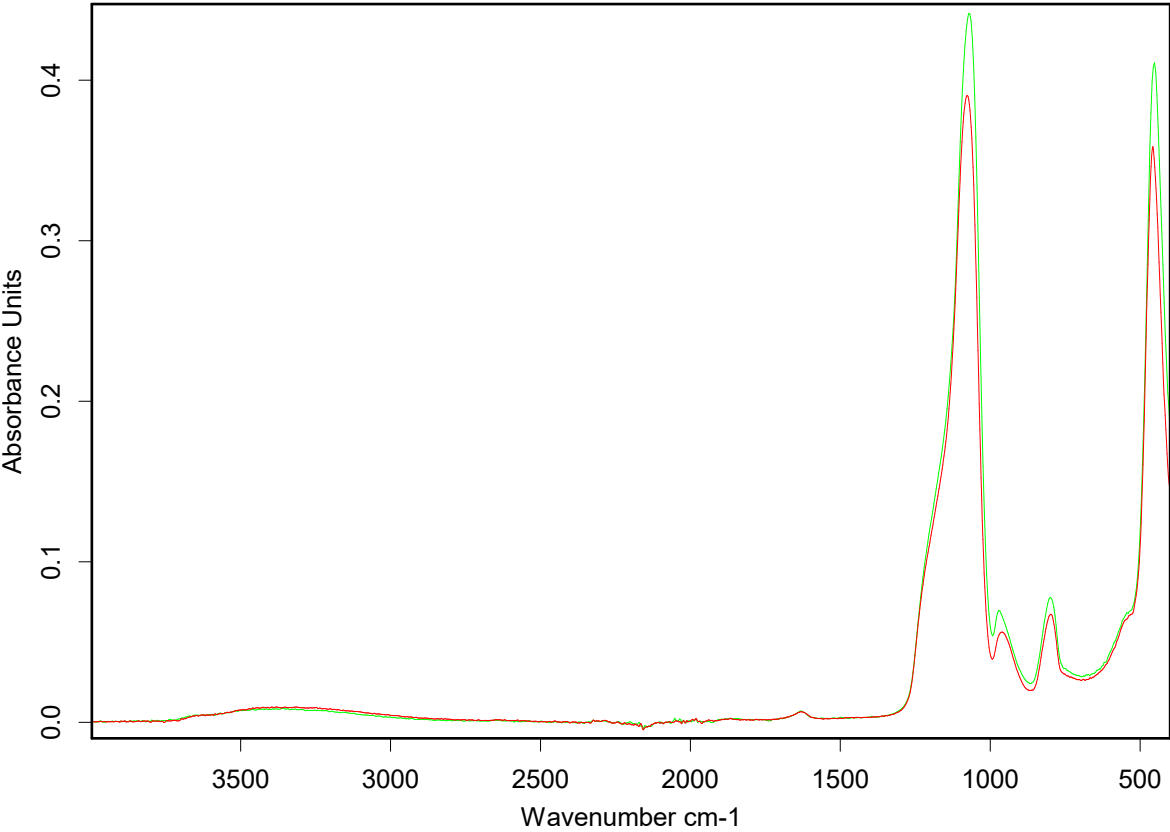
Rapid Complete Micro

| Test | Method | MDL | Specification | Result | Units |
|-------------------------------------|--------------|-----|---------------|--------|-------|
| Total Aerobic Microbial Count (TPC) | USP <2021> | 100 | Report | <100 | cfu/g |
| Total Coliforms | USP <2022> | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Report | Absent | |
| <i>Salmonella</i> | USP <2022> | | Report | Absent | |
| <i>Staphylococcus aureus</i> | USP <2022> | | Report | Absent | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |



Brescia Eppley
Quality Assurance Specialist

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit. OOS = Out of Specification. Alteration of this Certificate of Analysis is prohibited and will render the Certificate void. CTLA is the testing laboratory for the manufacturer. In case of product questions, please contact the manufacturer directly.



| | |
|---------------------|---|
| Product Number | 10030 Silicon Dioxide Precipitation 63211 Sta |
| Entry No. | 45 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|--|------------|-------------------|------------------|
| | 963 | 10030 Silicon Dioxide Precipitation 63211 Standard 1 | | | |

| Color | File | Path | Spectrum Type |
|-------|---|--|----------------|
| | 65167-ON 10030 Silicon Dioxide (410907).0 | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\DATA\MEAS | Query Spectrum |

KONSEP TRADISI SDN BHD

No. 15 Jalan Anggerik Mokara 31/56, Kota Kemuning, 40460 Bandar Shah Alam,
Selangor Darul Ehsan, Malaysia.

Tel : 603-5121 0198/8198 Fax : 603-5122 3198



Proudly Supplied By: Vivion, Inc.
929 Bransten Road, San Carlos, CA 94070
Phone: (650) 595-3600, Fax: (650) 595-2094

DATE : 01/08/2018
PRODUCT : STEARIC ACID VEG NF PWD
QUANTITY : 20.0 METRIC TONS (1000 CARTON BOXES)
LOT NO. : 251807 15786 106
MFG DATE : 25 JUL 2018
FDA - FOOD FACILITY REGISTRATION NO. 19375870600

P.O NO. : 15786
COUNTRY OF ORIGIN : MALAYSIA
EXPIRE DATE : 24 JUL. 2021

CERTIFICATION OF ANALYSIS

We certified that we have analysed a composite sample of the above mentioned goods with the following results:

| Identification | NF Specification | Test Methods | Test Result |
|---|---|-------------------|-------------|
| Appearance: Waxy, White Fined Powder A (Freezing Point) | To Pass Test | NF | Pass |
| B (Acid Value) | 194 - 212 | NF | 208.5 |
| C (Retention Time Peaks) | To Pass Test | NF | Pass |
| Residue on Ignition (%) | Not more than 0.1% | NF | <0.01 |
| Heavy Metals ppm | Not more than 10 ppm | NF | <10 |
| Lead ppm | 0.5 ppm max | | <0.05 |
| Arsenic ppm | 0.5 ppm max | | <0.02 |
| Mercury ppm | 1 ppm max | | <0.02 |
| Fat and Fixed Oils, Iodine Value USP <401> | Not more than 4.0 | NF | 0.33 |
| Color of Solution | Meets Requirements | NF | Pass |
| Acidity | Meets Requirements | NF | Pass |
| Freezing Point | 53 - 59 Deg. C | NF | 56.3 |
| Residual Solvents | No Solvents Used | | None |
| (NF Methods are described in the NF Monograph) | | | |
| Fatty Acid Composition in % | NF Method using USP Stearic Acid RS And USP Palmitic Acid RS | | |
| C ₁₂ /C ₁₄ | 3 % | - / <0.1 | |
| C ₁₆ | 40 % Min | 50.4 | |
| C ₁₈ | 40 % Min | 49.3 | |
| C ₂₀ | 1 % | 0.3 | |
| Combination of C ₁₆ & C ₁₈ in not less than 90% | | | |
| Mesh size | <u>% Retained (Max)</u> | <u>% Retained</u> | |
| 200 Mesh | 70.0 | 68.0 | |
| 100 Mesh | 10.0 | 6.0 | |
| 50 Mesh | 0 | 0 | |


Major (Retd) Foo See Nam
B.Sc., M.Sc Chemical Engineering
Quality Control Officer



KONSEP TRADISI SDN BHD

No. 15 Jalan Anggerik Mokara 31/56, Kota Kemuning, 40460 Bandar Shah Alam,
Selangor Darul Ehsan, Malaysia.

Tel : 603-5121 0198/8198 Fax : 603-5122 3198

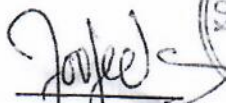
DATE : 01/08/2018
PRODUCT : STEARIC ACID VEG NF PWD
QUANTITY : 20.0 METRIC TONS (1000 CARTON BOXES)
LOT NO. : 251807 15786 106
MFG DATE : 25 JUL. 2018
FDA - FOOD FACILITY REGISTRATION NO. 19375870600


P.O NO. : 15786
COUNTRY OF ORIGIN : MALAYSIA
EXPIRE DATE : 24 JUL. 2021

CERTIFICATION OF ANALYSIS

We certified that we have analysed a composite sample of the above mentioned goods
with the following results:

| | Methods | Test Result |
|-------------------------|---------|-------------|
| Total Plate Count cfu/g | FDA/BAM | < 10 |
| Mould & Yeast cfu/g | FDA/BAM | < 10 |
| E. Coli | FDA/BAM | Absent |
| Salmonella in 25g | FDA/BAM | Absent |
| Staphylococcus aureus | FDA/BAM | Absent |
| Coliform | FDA/BAM | Absent |


Major (Rtd) Foo See Nam
B.Sc. M.Sc. Chemical Engineering
Quality Control Officer



Certificate of Analysis

Sample Information

CTLA ID: 31025
Date Received: 4/28/2021
Sample Name: 10050 EXC Stearic Acid, Vegetable
Lot Number: 12968
Customer: Origin Nutraceutical

| Analysis | Method | MDL | Specification | Result | Units |
|---------------------------------------|--------------|-----|---------------|----------|-------|
| ID, Rapid Complete Micro Combo | | | | | |
| ID | FTIR | | Report | >95 | % |
| Total Plate Count | USP <2021> | 100 | Report | <100 | cfu/g |
| Total Coliforms | BAM CH.4 | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | | Report | Negative | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Report | Negative | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |
| FTIR Spectra | FTIR | | Report | Attached | |

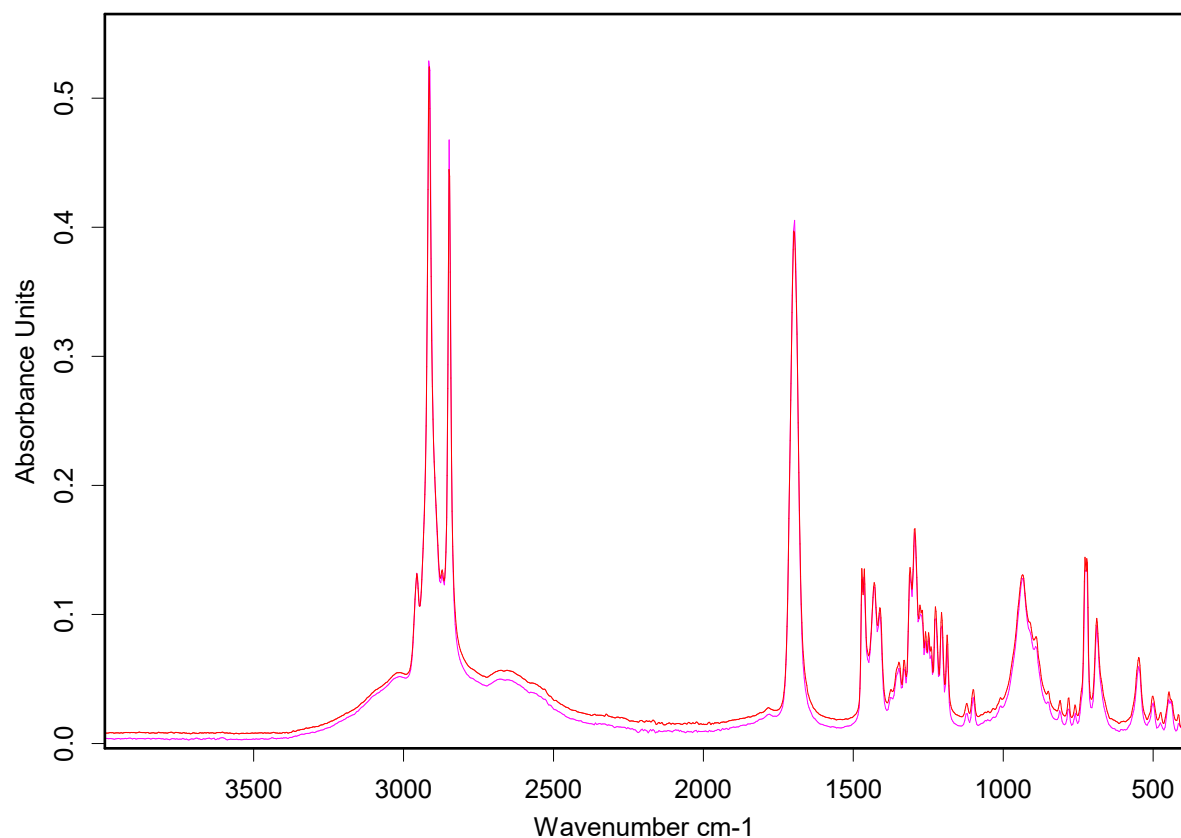
5/3/2021

DATE



Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.



| | |
|---------------------|--|
| Product Number | 10050 Stearic Acid Vegetable 4266 Standard 2 |
| Entry No. | 807 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|--|------------|-------------------|------------------|
| | 983 | 10050 Stearic Acid Vegetable 4266 Standard 2 | | | |

| Color | File | Path | Spectrum Type |
|-------|-------------------------------------|--|----------------|
| | 31025-ON 10050 Steurie Acid 12968.0 | C:\Users\Israel\Documents\Bruker\OPUS_7.5.18\Data\MEAS | Query Spectrum |

| | | |
|-----------------------------|--------------------|--|
| Product Name | : Synapsa® | |
| Batch Number | : N22030113 | Customer Product Code : LI/PLT/FBAMO-55A |
| Analytical Reference Number | : LN/AR/FP/22/0113 | Product Code : FBAMO-55A |
| Manufacturing Date | : March, 2022 | Customer Name : P.L.Thomas |
| Expiry Date | : February, 2024 | Botanical Name : <i>Bacopa monnieri</i> |
| Type of extract | : Powdered Extract | Country of origin : India |
| Extraction medium | : Ethanol & Water | Part of the Plant : Whole Plant |
| Date of Report | : March 18, 2022 | - |

| S.No. | TEST PARAMETERS | RESULT | SPECIFICATION | METHOD CODE |
|-------|--|---------------------------------|--|-------------------|
| 1 | Description | Greenish Brown Color dry Powder | Greenish Brown to Brown Color dry Powder | LI/QC/GP/STP-22A |
| 2 | Identification by HPTLC | Complies | To Comply | LI/QC/HT/STP-01A |
| 3 | Particle Size through 40 mesh | 100% | NLT 95% | LI/QC/GP/STP-07A |
| 4 | Loss on Drying | 1.31% | NMT 5% | LI/QC/GP/STP-01A |
| 5 | Alcohol Soluble Extractives | 98.13% | NLT 90% on d/b | LI/QC/GP/STP-04A |
| 6 | Bulk Density | 0.60 gm/ml | NLT 0.5 gm/ml | LI/QC/GP/STP-11B |
| 7 | Heavy Metals by ICP-MS | | | |
| | i) Lead | <0.25 ppm | NMT 0.5 ppm | LI/QC/ICP/STP-02A |
| | ii) Cadmium | <0.15 ppm | NMT 0.3 ppm | LI/QC/ICP/STP-02A |
| | iii) Mercury | <0.05 ppm | NMT 0.1 ppm | LI/QC/ICP/STP-02A |
| | iv) Arsenic | 0.86 ppm | NMT 2.0 ppm | LI/QC/ICP/STP-02A |
| 8 | Residual Solvent By GC-MS | | | |
| | i) Ethanol | 118 ppm | NMT 500 ppm | LI/QC/GC/STP-02A |
| | ii) Ethyl acetate | Nil | - | LI/QC/GC/STP-04A |
| 9 | Pesticide residues | Complies* | To Comply as per USP <565> | USP <561>** |
| 10 | Assay | | | |
| | i) Total Bacosides By Spectrophotometric method | 62.41% | NLT 55.0% on d/b | LI/QC/SM/STP-01A |
| | ii) Bacoside A by HPLC (Bacoside A3, Bacopaside II, Bacoside X, Bacopasaponin C) | 9.82% | NLT 8.0% | LI/QC/HL/STP-10A |

Product Name: Synapsa®

Batch Number: N22030113

| 11 | Microbiological Parameters | | | |
|----|----------------------------------|--------------|------------------------|------------------|
| | i) Total Aerobic Microbial Count | <100 Cfug/gm | NMT 3,000 Cfug/gm | LI/QC/MB/STP-01B |
| | ii) Total Yeast & Mold Count | <10 Cfug/gm | NMT 100 Cfug/gm | LI/QC/MB/STP-02B |
| | iii) E.Coli | Absent | Should be Absent/10 gm | LI/QC/MB/STP-03B |
| | iv) Salmonella | Absent | Should be Absent/10 gm | LI/QC/MB/STP-05B |
| | v) Staphylococcus aureus | Absent | Should be Absent/10 gm | LI/QC/MB/STP-07B |
| | vi) Pseudomonas aeruginosa | Absent | Should be Absent/10 gm | LI/QC/MB/STP-09B |
| | vii) Total coliforms | Negative | Negative/10 gm | LI/QC/MB/STP-10B |

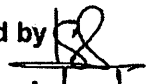
Remarks : The above material complies to the prescribed standards.

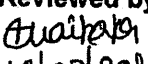
Storage conditions : Keep in tightly closed container free of excessive heat, moisture, light and air.

Packing details : 10 Kg Packed in 30 Lts HDPE drums with 24" X 36" X 350G double lined LDPE bags.

Note

- i) *Skip lot testing once in a year.
- ii) **Testing is carried out in the contract testing Laboratory.
- iii) The Herbal extracts supplied by Laila Nutraceuticals are bulk dietary ingredients intended for further processing only and are not finished Dietary Supplement products in the form being sold*.

Prepared by 
18/03/2022

Reviewed by

18/03/2022

Approved by

18/03/2022
Quality Assurance

Certificate of Analysis

Sample Information

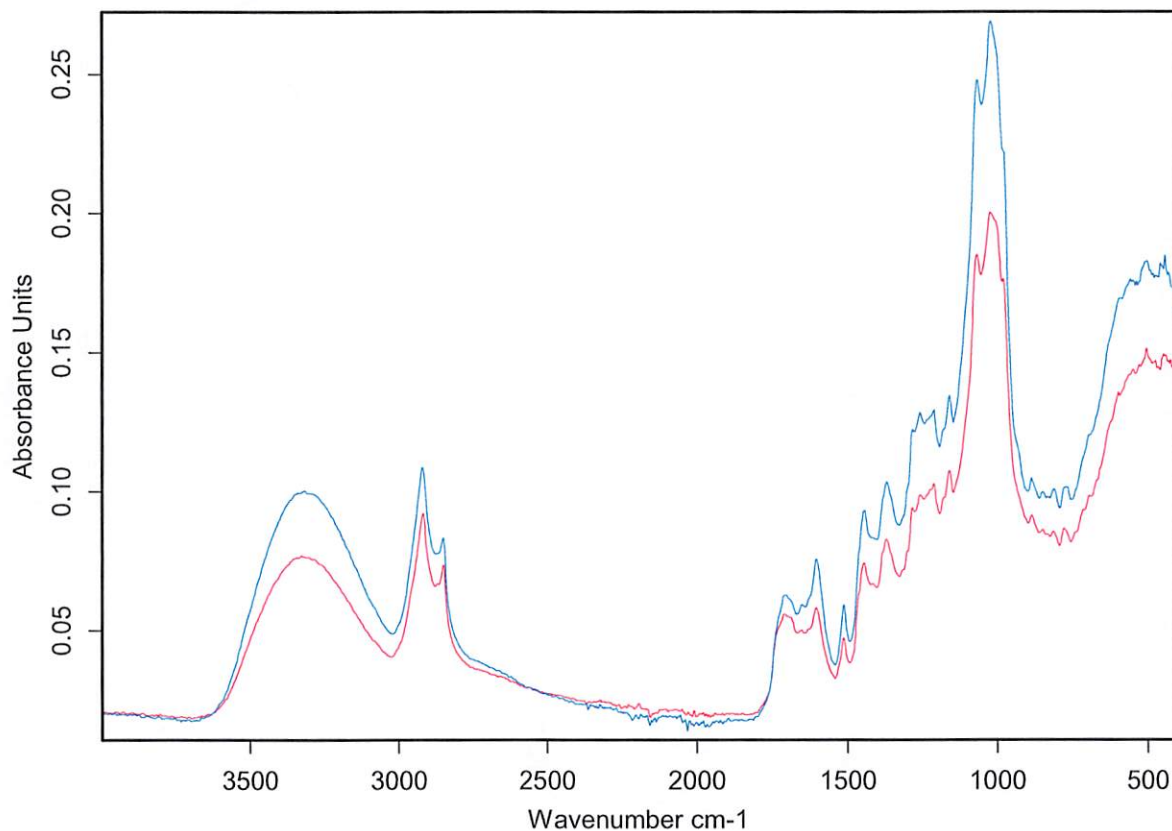
CTLA ID: 62443
Date Received: 11/17/2022
Sample Name: 10546 DRM Bacopa 55% Synapsa
Lot Number: 45832
Customer: Origin Nutraceutical

| Analysis | Method | MDL | Specification | Result | Units |
|-------------------------------------|--------------|--------|---------------|----------|-------|
| Bacosides via UV-Vis | UV-Vis | 0.0077 | >55 | 60.125 | % |
| FTIR Spectra | FTIR | | Report | Attached | |
| ID, Rapid Complete Micro Combo | | | | | |
| ID | FTIR | | Report | 95 | % |
| Total Plate Count | USP <2021> | 100 | Report | 100 | cfu/g |
| Total Coliforms | USP <2021> | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | | Report | Negative | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Report | Negative | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |
| HPTLC Bacopa monnieri | HPTLC | | Report | Pass | |

12/14/2022
DATE


Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.



| | |
|---------------------|--|
| Product Number | 10546 Bacopa 55% Synapsa 5085 Standard 1 |
| Entry No. | 893 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|--|------------|-------------------|------------------|
| | 950 | 10546 Bacopa 55% Synapsa 5085 Standard 1 | | | |

| Color | File | Path | Spectrum Type |
|-------|---|--|----------------|
| | 62443-ON 10546 DRM Bacopa 55% Synapsa (45832).0 | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\DATA\MEAS | Query Spectrum |

Certificate of Analysis

Sample Information

CTLA ID: 62443
 Date Received: 11/17/2022
 Sample Name: 10546 DRM Bacopa 55% Synapsa
 Lot Number: 45832
 Customer: Origin Nutraceutical

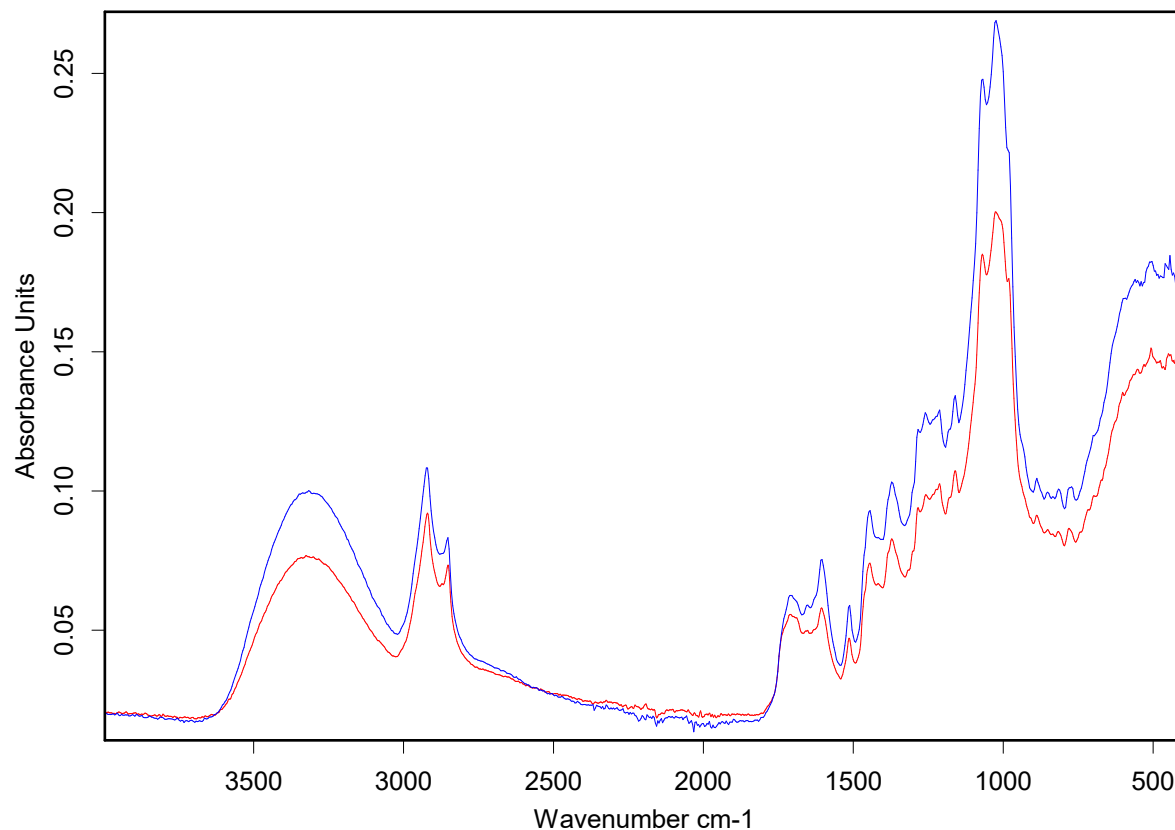
| Analysis | Method | MDL | Specification | Result | Units |
|-------------------------------------|--------------|--------|---------------|----------|-------|
| Bacosides via UV-Vis | UV-Vis | 0.0077 | >55 | 60.125 | % |
| FTIR Spectra | FTIR | | Report | Attached | |
| ID, Rapid Complete Micro Combo | | | | | |
| ID | FTIR | | Report | 95 | % |
| Total Plate Count | USP <2021> | 100 | Report | 100 | cfu/g |
| Total Coliforms | USP <2021> | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | | Report | Negative | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Report | Negative | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |
| HPTLC Bacopa monnieri | HPTLC | | Report | Pass | |

12/14/2022
DATE



Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.



| | |
|---------------------|--|
| Product Number | 10546 Bacopa 55% Synapsa 5085 Standard 1 |
| Entry No. | 893 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|--|------------|-------------------|------------------|
| | 950 | 10546 Bacopa 55% Synapsa 5085 Standard 1 | | | |

| Color | File | Path | Spectrum Type |
|-------|---|--|----------------|
| | 62443-ON 10546 DRM Bacopa 55% Synapsa (45832).0 | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\DATA\MEAS | Query Spectrum |



SICHUAN TONGSHENG AMINO ACID CO., LTD

Manufacture address: No. 23 of Yongdinghe West Road, Tianyuan development zone, Deyang, Sichuan, China

Certification of Analysis

Product Name: L-Theanine

CAS#: 3081-61-6

Molecular Formula: $C_7H_{14}N_2O_3$

Molecular Weight: 174.2

Manufacture time: 2021-08-16

Batch No.: 010095-H2021082301

Testing time: 2021-08-23

Expiry time: 2024-08-15

Bulk Density: 0.30g/mL

Tapped Density: 0.46g/mL

Specification: (Enterprise Standard)

| Item | Standard | Analysis data |
|--|--|--------------------|
| Appearance | White crystalline powder | Conforms |
| Bulk density | >0.2g/ml | 0.30g/ml |
| Particle size | 90% through 80mesh | 90% through 80mesh |
| Solubility (1.0g/20ml H ₂ O) | Clear Colorless | Conforms |
| Specific rotation(a) _{D20} (C=1, H ₂ O) | +7.5° to +8.5° | +7.85° |
| Assay | 98.0-102.0% | 99.56% |
| Melting Point (°C) | 200°C to 210.0 °C | 201.7-202.0°C |
| Chloride(Cl) | Not more than 0.02% | <0.02% |
| Heavy metals(Pb) | Not more than 10ppm | <10ppm |
| Iron(Fe) | Not more than 10ppm | <10ppm |
| Lead | Not more than 0.5ppm | Conforms |
| Hg | Not more than 1ppm | Conforms |
| Cadmium(Cd) | Not more than 1ppm | Conforms |
| Arsenic(As ₂ O ₃) | Not more than 1ppm | <1ppm |
| Total Plate Count | <1000 cfu /g | Conforms |
| Yeast& mould | Not more than 100cfu/g | Conforms |
| E.Coli | NMT30MPN/100h | Negative |
| Salmonella | Negative | Negative |
| S.aureus | Negative | Negative |
| Loss on drying | Not more than 1.0% | 0.22% |
| Residue on ignition | Not more than 0.2% | 0.08% |
| PH | 5.0-6.0 | 5.66 |
| Conclusion | The product conforms to the standard, the method of test consult AJI | |

Inspector: 刘玉苹

Manager: 肖宏林

Tel No.: 86-838-2274206

Fax No.: 86-838-2274207

Sheet Made on: 29, 2021

Signature:



Certificate of Analysis

Sample Information

CTLA ID: 61531
Date Received: 11/1/2022
Sample Name: 10310 L-Theanine
Lot Number: 44330 / 44331
Customer: Origin Nutraceutical

| Analysis | Method | MDL | Specification | Result | Units |
|-------------------------------------|--------------|---------|---------------|----------|-------|
| Rapid Complete Micro | | | | | |
| Total Plate Count | USP <2021> | 100 | Report | 600 | cfu/g |
| Total Coliforms | USP <2021> | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | | Report | Negative | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Report | Negative | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |
| L-Theanine | HPLC | 0.07676 | Report | 102.333 | % |

11/10/2022

DATE



Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit. This document is not to be altered or reproduced except by the original authorizing body (CTLA)

**Contract Testing Laboratories of America**

Email: cs@ctlatesting.com

Phone: (385) 477-4999

ISO/IEC 17025:2017 102267

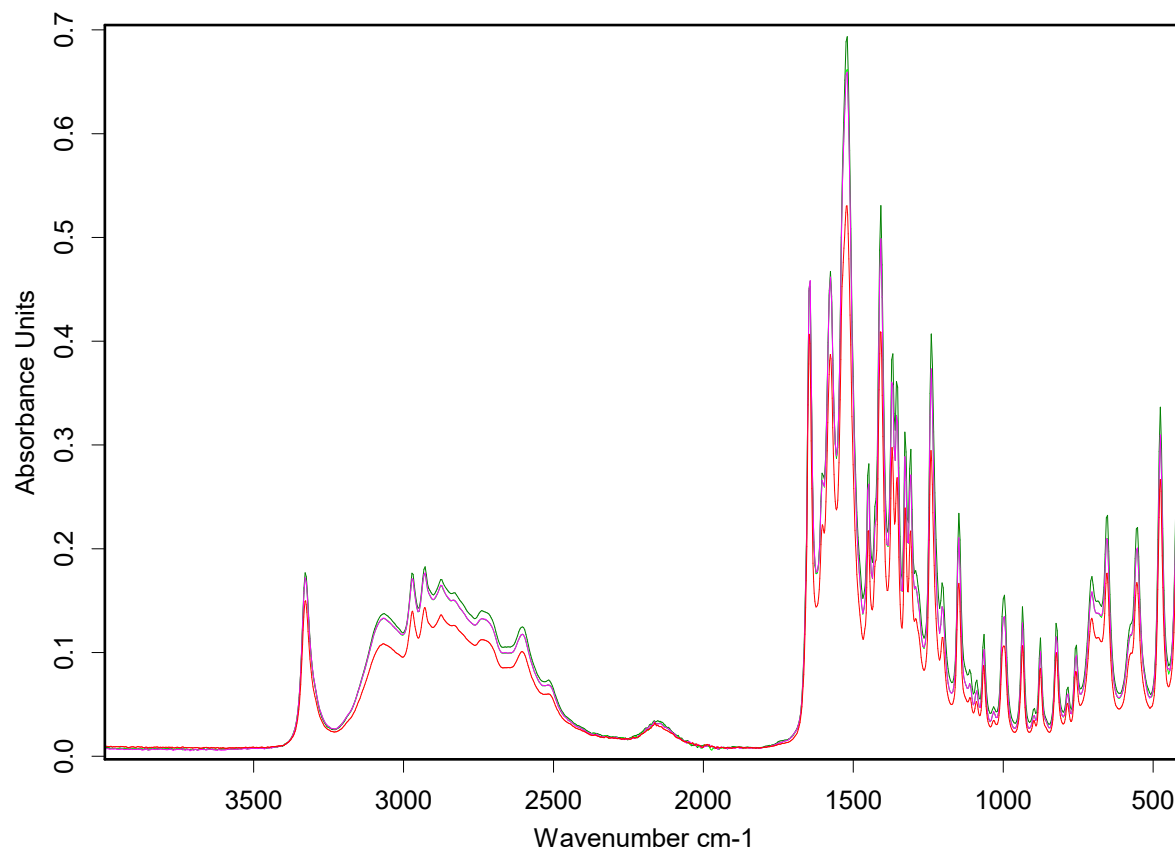
FDA Registration #: 10849021016

DEA #:12170754-1714, 12170754-8915

Certificate of Analysis**Client Name:** Origin Nutraceutical**Sample ID:** 65036**Address:** 151 E 3450 N Spanish Fork, UT 84660**Sample Type:****Date Recieved:** 08/30/2022**Sample Name:** 10310 DRM L-Theanine**Date Completed:****Lot Number:** 44330**COA Notes:****Chemistry Category****ID**

| Test | Method | MDL | Specification | Result | Units |
|------|--------|-----|---------------|--------|-------|
| ID | FTIR | | Report | 97.3 | % |

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit. OOS = Out of Specification. Alteration of this Certificate of Analysis is prohibited and will render the Certificate void. CTLA is the testing laboratory for the manufacturer. In case of product questions, please contact the manufacturer directly.



| | |
|---------------------|-------------------------------------|
| Product Number | 10310 L-Theanine 63011 Standard 1 |
| Entry No. | 293 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|-----------------------------------|------------|-------------------|------------------|
| | 973 | 10310 L-Theanine 60756 Standard 2 | | | |
| | 973 | 10310 L-Theanine 62382 Standard 3 | | | |
| | 949 | 10310 L-Theanine 63011 Standard 1 | | | |

| Color | File | Path | Spectrum Type |
|-------|---|--|----------------|
| | 65036-ON 10310 DRM L-Theanine (44330).0 | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS | Query Spectrum |



JIAHERB
essentials of nature



CERTIFICATE OF ANALYSIS

Rhodiola Rosea Extract (Rhodiola5Plus™) 3% Rosavins+2% Salidroside HPLC

GENERAL INFORMATION

| | | | |
|--------------------------|-----------------------|------------------------|--------------|
| Lot Number | CHJT-C-A121150 | Report Date | 12/21/2021 |
| Manufacture Date | 12/14/2021 | Expiration Date | 12/13/2024 |
| Botanical Species | <i>Rhodiola rosea</i> | Part Used | Root |
| Country of Origin | Russia | Carrier Used | Maltodextrin |
| Solvent Used | Water & Ethanol | Kosher Halal | Yes Yes |

| ITEM | SPECIFICATION | TEST RESULTS | METHOD |
|------|---------------|--------------|--------|
|------|---------------|--------------|--------|

PHYSICAL & CHEMICAL

| | | | |
|----------------|---|--------------------------|-------------------|
| Identification | Corresponds to Reference Standard | Complies | HPTLC USP<203> |
| Appearance | Yellow brown to reddish brown fine powder | Yellow brown fine powder | Organoleptic |
| Rosavins | NLT (%) 3.0 | 3.00 | HPLC USP<621> |
| Salidroside | NLT (%) 2.0 | 2.22 | HPLC USP<621> |
| Particle Size | NLT 95% through 80 mesh | Complies | USP<786> |
| Loss on Drying | NMT (%) 10.0 | 3.44 | USP<731> |
| Bulk Density | Between (g/100ml) 30-70 | 49 | USP<616>Method I |

CONTAMINANTS

| | | | |
|-------------------|--------------------|----------|--------------------|
| Lead (Pb) | NMT (ppm) 2.0 | 0.0097 | ICP-MS USP<730> |
| Arsenic (As) | NMT (ppm) 2.0 | 0.0778 | ICP-MS USP<730> |
| Cadmium (Cd) | NMT (ppm) 1.0 | 0.0029 | ICP-MS USP<730> |
| Mercury (Hg) | NMT (ppm) 1.0 | 0.0095 | ICP-MS USP<730> |
| Solvent Residue | Meets Requirements | Complies | GC USP<467> |
| Pesticide Residue | Meets Requirements | Complies | USP<561>Modified |

MICROBIOLOGICAL

| | | | |
|-----------------------|--------------------|----------|-----------|
| Total Plate Count | NMT (cfu/g) 10,000 | 100 | USP<2021> |
| Yeast & Mold | NMT (cfu/g) 1,000 | 55 | USP<2021> |
| E.Coli. | Absent (cfu/10g) | Complies | USP<2022> |
| Salmonella | Absent (cfu/10g) | Complies | USP<2022> |
| Staphylococcus aureus | Absent (cfu/10g) | Complies | USP<2022> |

PACKING & STORAGE

Packed in a polyethylene lined corrugated package.
Store in a well-closed container away from moisture, light, and heat.
Net Weight: 25 kg Pack Type: Box

SHELF LIFE

36 months if under the conditions above and in its original packaging.

MANUFACTURER

Shaanxi Jiahe Pharmaceutical Co., Ltd

NOTE

This is a natural product, variances may be found that are due to the growing and drying conditions, age, season, harvest time, geographic location, production process, etc.

Completed by: Qiangang Wang

Signature: *Qian gang Wang*

Title: Quality Control Manager

Certificate of Analysis

Sample Information

CTLA ID: 61544
Date Received: 11/4/2022
Sample Name: 10405 Rhodiola Rosea 3%/2%
Lot Number: 45073
Customer: Origin Nutraceutical

| Analysis | Method | MDL | Specification | Result | Units |
|-------------------------------------|--------------|-------|---------------|--------------|--------|
| Rosavins | HPLC | 0.002 | >3 | 5.232 | g/100g |
| Salidroside | HPLC | .001 | 2 | 3.026 | g/100g |
| Rhodiola Rosea | HPTLC | | Report | See COA note | |
| Rapid Complete Micro | | | | | |
| Total Plate Count | USP <2021> | 100 | Report | <100 | cfu/g |
| Total Coliforms | USP <2021> | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Report | Absent | |
| <i>Salmonella</i> | USP <2022> | | Report | Absent | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Report | Absent | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |

HTPLC result: The fingerprint of the test solution is similar to that of the corresponding reference sample.

12/20/2022
DATE



Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.

Certificate of Analysis



Client Name: Origin Nutraceutical



Sample ID: 65264

Address: 151 E 3450 N
Spanish Fork, UT 84660

Sample Type:

Date Recieved: 10/13/2022

Sample Name: 10405 DRM Rhodiola Rosea 3%/2%

Date Completed: 10/17/2022

Lot Number: 45073

COA Notes:

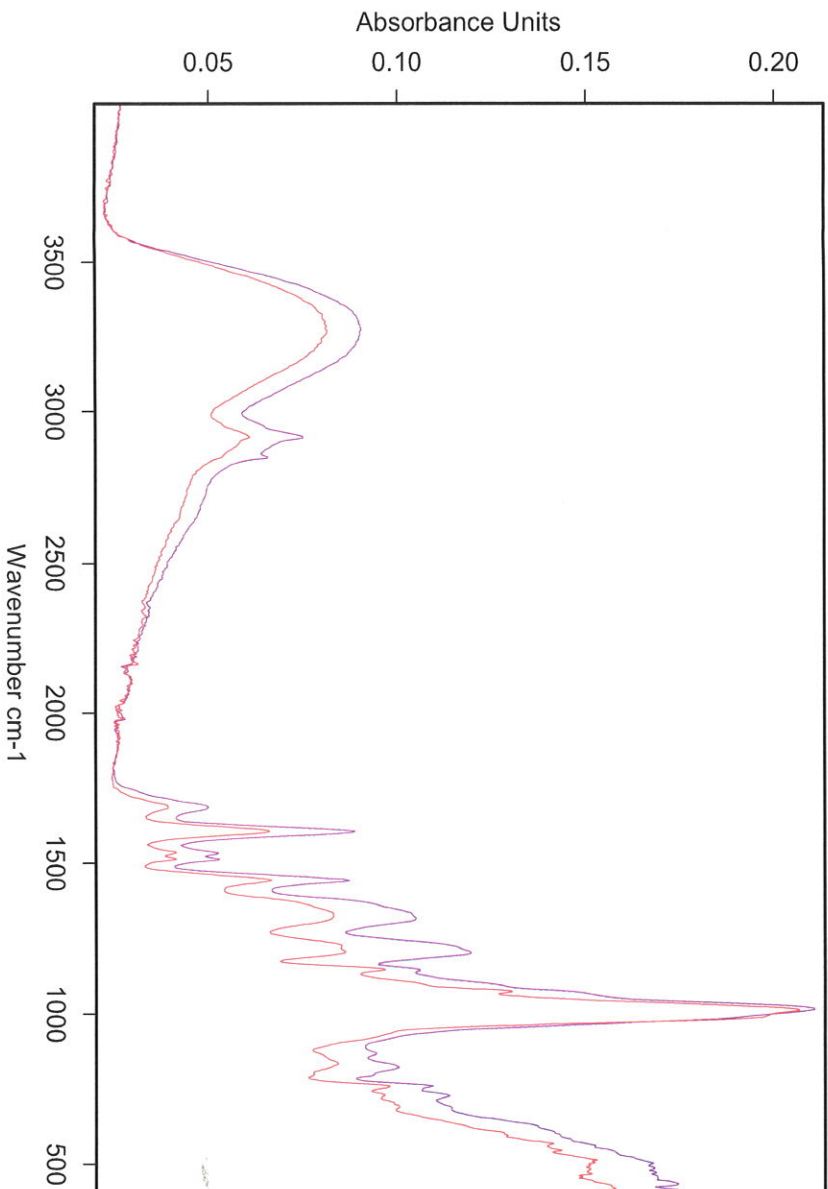
Chemistry Category

ID

| Test | Method | MDL | Specification | Result | Units |
|------|--------|-----|---------------|--------|-------|
| ID | FTIR | | Report | 92 | % |

Brescia Eppley
Quality Assurance Specialist

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit. OOS = Out of Specification. Alteration of this Certificate of Analysis is prohibited and will render the Certificate void. CTLA is the testing laboratory for the manufacturer. In case of product questions, please contact the manufacturer directly.



| | |
|---------------------|---|
| Product Number | ON 10405 DRM Rhodiola Rosea 3%-2% (2020 |
| Entry No. | 11 |
| Library name | |
| Library description | |
| Copyright | User library |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|--|------------|-------------------|------------------|
| 910 | | ON 10405 DRM Rhodiola Rosea 3%-2% (20208) Standard 3 | | | |

| Color | File | Path | Spectrum Type |
|-------|---|--|----------------|
| | 65264-ON 10405 DRM Rhodiola Rosea 3%-2% (45073).2 | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS | Query Spectrum |

Huazhong Pharmaceutical Co., Ltd.

No.118 Xianshan Road, Xiangyang City, Hubei Province, China

10226

Certificate of Analysis

| | | | |
|----------------------------|--|-----------------------|---------------------|
| Product | Thiamine HCL, USP | Ref. Standard: | FCC11/USP42 |
| CAS # (Active) : | 67-03-8 | Batch / Lot # | Y01202001116 |
| Formula (Active): | C₁₂H₁₇ClN₄OS • HCl | MFG Date | 01/28/2020 |
| PAT Item # : | 30-8212 | Retest Date | 01/27/2023 |
| Country of Origin : | CHINA | Batch Size | 500 KG |
| | | Pack Size | 25 KG, Drum |

| Analysis Contents | Specification | Methods | Results |
|------------------------|---|----------|--------------------|
| DESCRIPTION | White granular powder | USP | Conform |
| IDENTIFICATION | Positive | USP | Positive |
| PARTICLE SIZE | ≥ 95.0% through 20 mesh | US Sieve | 100.0% |
| BULK DENSITY | *As Reported | | Not Tested |
| TAPPED DENSITY | *As Reported | | Not Tested |
| APPEARANCE OF SOLUTION | Meets requirement | USP | Pass |
| ABSORBANCE OF SOLUTION | ≤ 0.025 | BP | 0.013 |
| PH | 2.7 ~ 3.3 | USP | 3.1 |
| LIMIT OF NITRATE | Meets requirement | USP | Pass |
| SULFATE | ≤ 300 PPM | BP | < 300 PPM |
| HEAVY METAL | ≤ 10 PPM | BP | < 10 PPM |
| ARSENIC | ≤ 1 PPM | AAS | < 1 PPM |
| CADMIUM | ≤ 3 PPM | AAS | < 0.3 PPM |
| LEAD | ≤ 0.5 PPM | AAS | < 0.5 PPM |
| MERCURY | ≤ 0.1 PPM | AAS | < 0.1 PPM |
| RESIDUAL SOLVENTS | Ethanol ≤ 0.50% | USP | < 0.5% |
| | Methanol ≤ 0.30% | USP | < 0.3% |
| RELATED SUBSTANCES | Within limit | USP | Pass |
| LOSS ON DRYING (%) | ≤ 5.00% | USP | 1.50% |
| RESIDUE ON IGNITION | ≤ 0.10% | USP | 0.05% |
| CHROMATOGRAPHIC PURITY | ≤ 1.00% | USP | 0.10% |
| ASSAY (on dried basis) | 98.50% ~ 101.00% | USP | 99.50% |
| MICROBIOLOGY | | | |
| TOTAL PLATE COUNT | ≤ 1,000 CFU / Gram | CP | < 1,000 CFU / Gram |
| YEAST & MOLD | ≤ 100 CFU / Gram | CP | < 100 CFU / Gram |
| COLIFORMS | ≤ 10 CFU / Gram | CP | < 10 CFU / Gram |
| E. COLI | Negative | CP | Negative |
| STAPH. AUREUS | Negative | CP | Negative |
| SALMONELLA | Negative | CP | Negative |
| CONCLUSION | The above product conforms to listed standard(s) | | |

QC Department

Verified by:

K.Y.

Analyst:

J.J.

Date:

08/10/2020

Date:

08/10/2020



Contract **TESTING** Laboratories

OF AMERICA

Certificate of Analysis

Sample Information

CTLA ID: 22615
Date Received: 10/23/2020
Sample Name: 10226 DRM Vitamin B-1 Thiamine Hydrochloride
Lot Number: 29927
Customer: Origin Nutraceutical

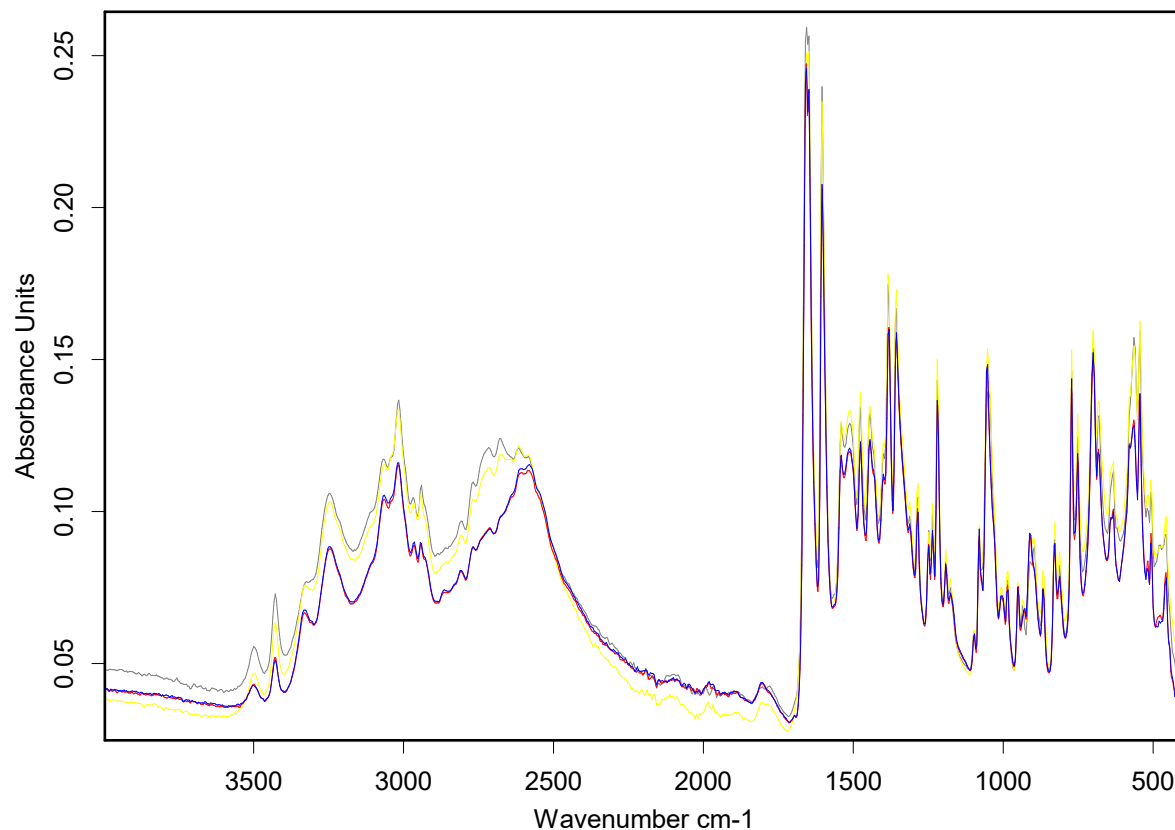
| Analysis | Method | MDL Specification | Result | Units |
|---------------------------------------|-------------|-------------------|----------|-------|
| ID, Rapid Complete Micro Combo | | | | |
| ID | FTIR | Report | >95 | % |
| Total Plate Count | USP <2021> | 100 Report | <100 | cfu/g |
| Total Coliforms | BAM CH.4 | 10 Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | Report | Negative | |
| <i>Staphylococcus aureus</i> | USP <2022> | Report | Negative | |
| Rapid Yeast and Mold | AOAC 997.02 | 10 Report | <10 | cfu/g |

10/27/2020

DATE


Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.



| | |
|---------------------|---|
| Product Number | 10226 Vitamin B1 Thiamine HCL 4103 Standard |
| Entry No. | 792 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|--------|-------------|--|------------|-------------------|------------------|
| Blue | 986 | ON 10226 DRM Vitamin B-1 Thiamine Hydrochloride (29927) Standard 3 | | | |
| Yellow | 883 | 10226 Vitamin B-1 Thiamine Hydrochloride 3212 Standard 1 | | | |
| Grey | 872 | 10226 Vitamin B1 Thiamine HCL 4103 Standard 2 | | | |

| Color | File | Path | Spectrum Type |
|-------|--|--|----------------|
| Red | 22615- ON 10226 DRM Vitamin B-1 Thiamine Hydrochloride | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS New New | Query Spectrum |

Certificate of Analysis

Sample Information

CTLA ID: 61534
Date Received: 11/1/2022
Sample Name: 10226 Vitamin B-1 Thiamine Hydrochloride
Lot Number: 29927
Customer: Origin Nutraceutical

| Analysis | Method | MDL Specification | Result | Units |
|--------------------------|--------|-------------------|---------|-------|
| Vitamin B1 (Thiamin HCl) | HPLC | 0.165 Report | 101.580 | % |

11/9/2022
DATE


Quality Manager

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Riboflavin 5 Phosphate Sodium USP Powder**Batch#** 2020009

Manufacture Date October 2, 2020

Retest Date October 1, 2022

Product Characteristics

| | |
|-------------------|--|
| Appearance | Yellow to orange-yellow crystalline powder |
| Country of Origin | China |
| Manufacturer | Hubei Guangji Pharmaceutical Co Ltd |

| Profile | Specification | Result |
|-------------------------|-------------------|----------|
| Identification | Positive | Complies |
| pH | 5.0 – 6.5 | 6.0 |
| Specific rotation | +37° to +42° | +38.2° |
| Lumiflavin | ≤ 0.025 | 0.006 |
| Related substances | | |
| Free riboflavin | ≤ 6.0% | 2.6% |
| Riboflavin diphosphates | ≤ 6.0% | 1.4% |
| Inorganic phosphate | Meets requirement | Complies |
| Loss on drying | ≤ 7.5% | 3.8% |
| Residue on ignition | ≤ 25.0% | 22.6% |
| Heavy metals | ≤ 10 mg/kg | Complies |
| Residual solvents | Meets USP | Complies |
| Assay (on dried basis) | 73.0% - 79.0% | 73.7% |

Storage

Store in tight containers, protected from light, moisture and heat.

TR Reference# T2103026**Approved by:** *Mao Jian* 3-17-21

Certificate of Analysis

Sample Information

CTLA ID: 31018
Date Received: 4/28/2021
Sample Name: 10227 Riboflavin 5 Phosphate
Lot Number: 35205
Customer: Origin Nutraceutical

| Analysis | Method | MDL | Specification | Result | Units |
|---------------------------------------|--------------|-----|---------------|----------|-------|
| ID, Rapid Complete Micro Combo | | | | | |
| ID | FTIR | | Report | >95 | % |
| Total Plate Count | USP <2021> | 100 | Report | <100 | cfu/g |
| Total Coliforms | BAM CH.4 | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | | Report | Negative | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Report | Negative | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |
| Vitamin B2 (Riboflavin) | HPLC | | 73–79 | | % |
| FTIR Spectra | FTIR | | Report | | |
| Preliminary results | | | | | |

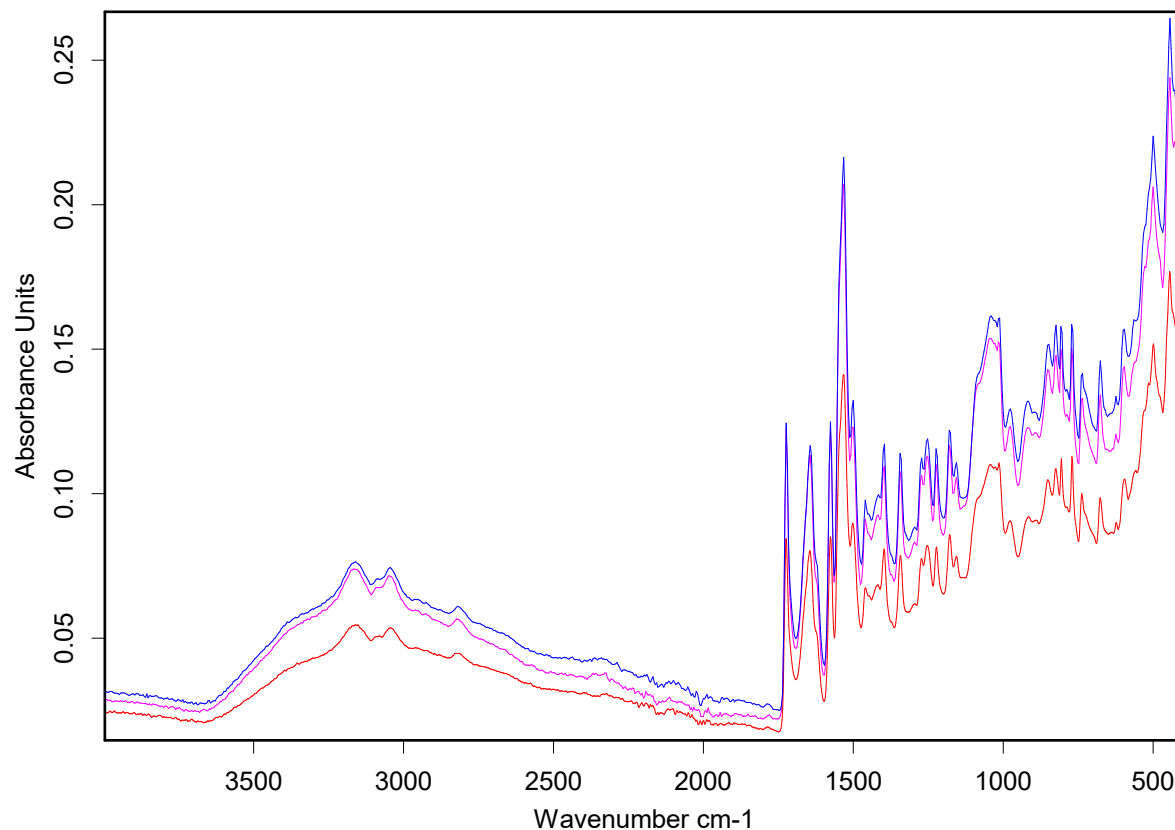
5/3/2021

DATE



Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.



| | |
|---------------------|--|
| Product Number | 10227 Riboflavin 5 Phosphate 1792 Standard |
| Entry No. | 646 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|---------|-------------|---|------------|-------------------|------------------|
| Blue | 974 | 10227 Riboflavin 5 Phosphate 2014033A-608226 Standard 1 | | | |
| Magenta | 970 | 10227 Riboflavin 5 Phosphate 1792 Standard 2 | | | |

| Color | File | Path | Spectrum Type |
|-------|---|--|----------------|
| Red | 31018-ON 10227 DRM Riboflavin 5 PhospNAtc (35205).0 | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS New New | Query Spectrum |

Certificate of Analysis



Client Name: Origin Nutraceutical



Sample ID: 65307

Address: 151 E 3450 N
Spanish Fork, UT 84660

Sample Type:

Date Recieved: 10/19/2022

Sample Name: 10227 Riboflavin 5 Phosphate

Date Completed: 10/31/2022

Lot Number: 35205

COA Notes:

Chemistry Category

Vitamin B2 (Riboflavin 5 Phosphate)

| Test | Method | MDL | Specification | Result | Units |
|-------------------------------------|--------|-------|---------------|--------|-------|
| Vitamin B2 (Riboflavin 5 Phosphate) | HPLC | 0.152 | 73-79 | 78.45 | % |

Brescia Eppley
Quality Assurance Specialist

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit. OOS = Out of Specification. Alteration of this Certificate of Analysis is prohibited and will render the Certificate void. CTLA is the testing laboratory for the manufacturer. In case of product questions, please contact the manufacturer directly.



AIDP Inc.
Product code: N0500

CERTIFICATE OF ANALYSIS

| | | | |
|---------------------|-------------------|------------------|-------------------------|
| Name of the Product | : NIACINAMIDE USP | Mfg. License No | : 153/RR/AP/2000/B/R(L) |
| Batch No | : 2038042022/J/A | Date of Mfg. | : March'2022 |
| Quantity | : 1000 Kgs | Date of Expiry | : February'2027 |
| | | Date of Analysis | : 05/05/2022 |

| TESTS | OBSERVATIONS | SPECIFICATION |
|--------------------------------|--|--|
| 01. Description and Solubility | : White crystalline powder. Is odourless and has a bitter taste. Solution is neutral to litmus. and Conforms | White crystalline powder. Is odourless or practically so, and has a bitter taste. Its solutions are neutral to litmus. Freely soluble in water and in alcohol; soluble in glycerin. |
| 02. Identification Test(A) IR | : Conforms | The IR Absorption spectrum is concordant with the spectrum of reference standard. |
| Test(B) UV | : 0.65 | A_{245}/A_{262} ratio is 0.63 and 0.67 |
| 03. Assay (by HPLC) | : 99.7% w/w | Not less than 98.5%w/w and not more than 101.5%w/w of $C_6H_6N_2O$, calculated on the dried basis. |

IMPURITIES :

| | | |
|-------------------------------------|--------------|------------------------|
| 04. Residue on Ignition | : 0.04 % w/w | Not more than 0.1% w/w |
| 05. Readily Carbonizable substances | : Conforms | Test as per USP. |

SPECIFIC TESTS :

| | | |
|--------------------|--------------------|------------------------|
| 06. Melting Range | : 128.5 to 130.5°C | Between 128 to 131 °C |
| 07. Loss on Drying | : 0.098%w/w | Not more than 0.5% w/w |

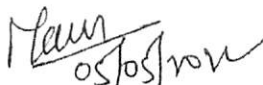
ADDITIONAL TEST:

| | | |
|------------------|------------|----------------------|
| 01. Heavy Metals | : < 20 ppm | Not more than 20 ppm |
|------------------|------------|----------------------|

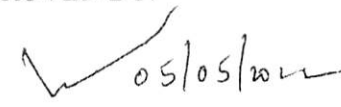
Storage condition: Store in Tight container.

Report: The material conforms the above stated analytical tests of USP 43.

ANALYSED BY:


M.MALLESWARA RAO
Analytical Chemist

APPROVED BY:


P.LAKSHMANA RAO
Manufacturing Chemist

A Jubilant Bhartia Company

OUR VALUES



Jubilant Ingrevia Limited
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Fax: +91 120 4234895-06
www.jubilant-ingrevia.com

Regd Office:
Bhartiagram, Gurgaon
Distt. Anand - 244 273
Uttar Pradesh, India
CIN: U74199UP2019PL112852

Certificate of Analysis

Sample Information

CTLA ID: 61527
Date Received: 11/1/2022
Sample Name: 10110 Niacinamide-Vitamin B3
Lot Number: 45126
Customer: Origin Nutraceutical

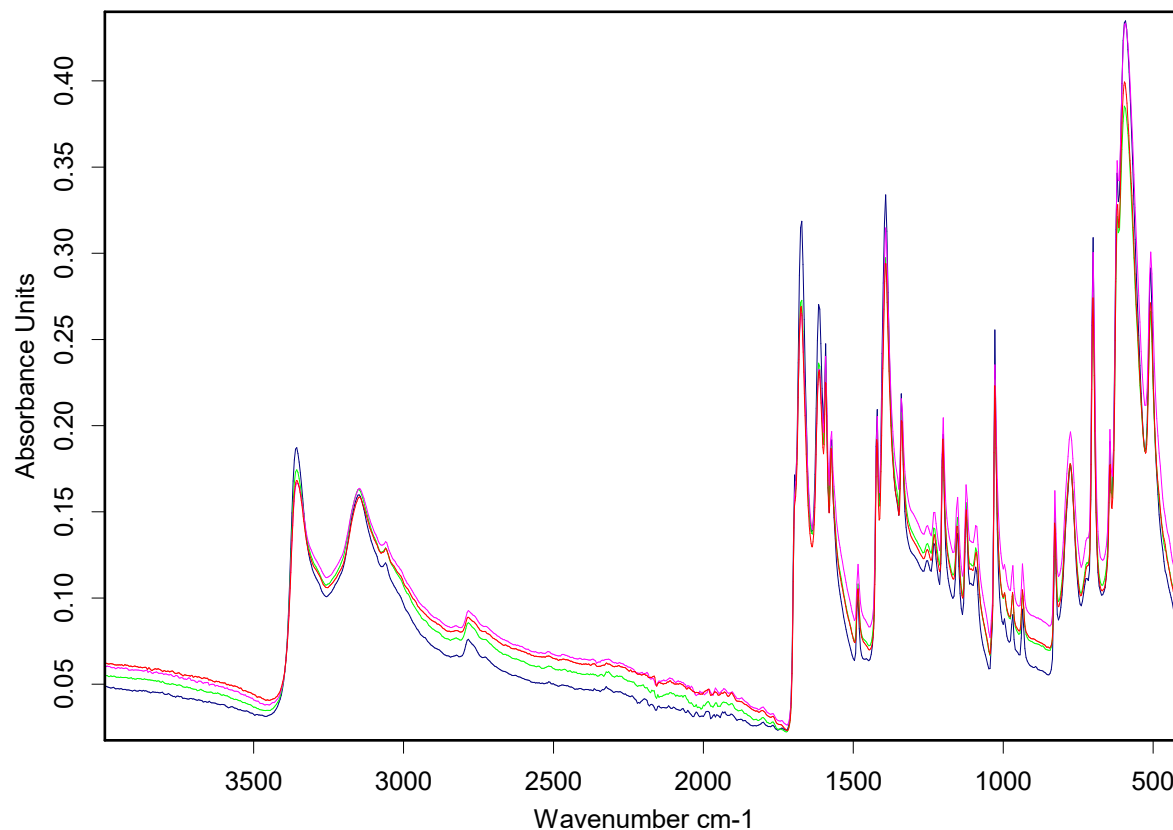
| Analysis | Method | MDL | Specification | Result | Units |
|--|--------------|------|---------------|----------|-------|
| Rapid Complete Micro | | | | | |
| Total Plate Count | USP <2021> | 100 | Report | 600 | cfu/g |
| Total Coliforms | USP <2021> | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Negative | Negative | |
| <i>Salmonella</i> | USP <2022> | | Negative | Negative | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Negative | Negative | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |
| Vitamin B3 (Niacinamide/Nicotinamide) | HPLC | 0.15 | Report | 100.08 | % |

11/9/2022
DATE



Quality Manager

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| | |
|---------------------|-------------------------------------|
| Product Number | 10110 Niacinamide 61252 Standard 2 |
| Entry No. | 128 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|------------------------------------|------------|-------------------|------------------|
| | 961 | 10110 Niacinamide 61602 Standard 3 | | | |
| | 960 | 10110 Niacinamide 63205 Standard 1 | | | |
| | 904 | 10110 Niacinamide 61252 Standard 2 | | | |

| Color | File | Path | Spectrum Type |
|-------|--|--|----------------|
| | 65281-ON 10110 DRM Niacinamide - Vitamin B3 (Kosher) (| C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS | Query Spectrum |



杭州鑫富科技有限公司

Hangzhou Xinfu Science & Technology Co.,Ltd.

CERTIFICATE OF ANALYSIS

Product Name: D-Calcium Pantothenate

| | | | |
|-----------------------|------------|----------------|------------|
| Batch No. | 20082503 | Quantity | 2700kgs |
| Date of manufacturing | 08/25/2020 | Date of expiry | 08/24/2023 |

| Item | Test Method | Standard | Result |
|---|-------------------|--------------------------------------|------------------------|
| Appearance | USP | White powder | White powder |
| Infrared identification | USP | Meets standard graph | Meets standard graph |
| Identification of calcium | USP | Meets all requirements | Meets all requirements |
| Optical rotation(Dried Basis) | USP | +25°- +27.5° | +26.7° |
| Alkalinity | USP | No Pink reaction within 5 Seconds | Conforms |
| Loss on drying | USP(105°for 3 HR) | <=5.0% | 2.2% |
| Residual Solvent (Methanol) | USP | <=0.3% | 0.05% |
| Calcium Content | USP | 8.2-8.6% | 8.4% |
| Assay of Calcium | USP | 98.0-102.0% | 99.0% |
| Pantothenate(On Dried Basis) | | | |
| The above items are tested every batch. | | | |
| Arsenic Assay | AA or ICP-MS | <=1.0 ppm | Conforms |
| Cadmium Assay | AA or ICP-MS | <=0.5 ppm | Conforms |
| Lead Assay | AA or ICP-MS | <=0.5 ppm | Conforms |
| Mercury Assay | AA or ICP-MS | <=0.1ppm | Conforms |
| Microbiological Test | | | |
| Total Plate Count | USP | <1,000 | Conforms |
| Yeast and Mold | USP | <100 | Conforms |
| Salmonella | USP | Negative | Conforms |
| E.Coli | USP | Negative | Conforms |
| Staphylococcus Aureus | USP | Negative | Conforms |
| Coliform | USP | <=100cfu/g | Conforms |
| The above items are based on periodic analysis. | | | |
| Storage | | | |
| Store in an air tight container in a dry place, protected from light. | | | |
| Conclusion: Complies with current USP43.Calcium Pantothenate is manufactured in China and all raw materials originate from China. Calcium Pantothenate complies with Proposition 65.Xinfu can guarantee that this product does not contain Melamine and any of its by products. | | | |

Complied by:

Rechecked by:

Kathy

Jian miao

杭州鑫富科技有限公司
HANGZHOU XINFU SCIENCE&TECHNOLOGY CO.,LTD

Add:No.9 Shangguafan, Jinnan Distr., Lin'an, Hangzhou 311301, Zhejiang, P.R.China

Tel: + 86 571 6375 9259/9219

Fax: +86 571 6375 9260

Certificate of Analysis

Sample Information

CTLA ID: 61528
Date Received: 11/1/2022
Sample Name: 10111 Vitamin B-5 Calcium Pantothenate
Lot Number: 38888
Customer: Origin Nutraceutical

| Analysis | Method | MDL | Specification | Result | Units |
|-------------------------------------|--------------|-----|---------------|----------|-------|
| Rapid Complete Micro | | | | | |
| Total Plate Count | USP <2021> | 100 | Report | <100 | cfu/g |
| Total Coliforms | USP <2021> | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Negative | Negative | |
| <i>Salmonella</i> | USP <2022> | | Negative | Negative | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Negative | Negative | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |

11/3/2022
DATE


Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.

Certificate of Analysis

Sample Information

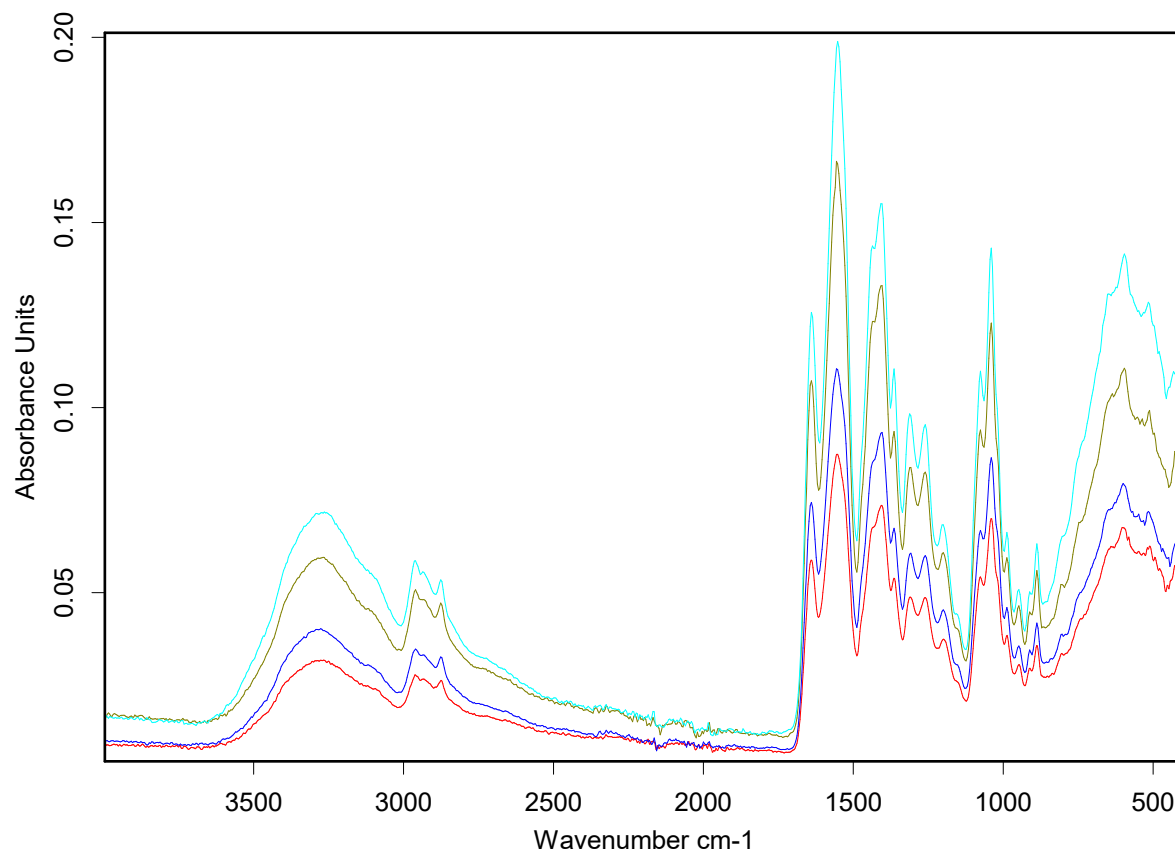
CTLA ID: 65454
Date Received: 1/4/2023
Sample Name: 10111 DRM Vitamin B-5 Calcium Pantothenate 100% (Kosher)
Lot Number: 38888
Customer: Origin Nutraceutical

| Analysis | Method | MDL Specification | Result | Units |
|-------------------------------------|--------|-------------------|---------|-------|
| Vitamin B5 (D-Calcium Pantothenate) | HPLC | 0.202 Report | 101.335 | % |

1/12/2023
DATE


Quality Manager

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| | |
|---------------------|---|
| Product Number | 10111 DRM Vitamin B-5 Calcium Pantotenate |
| Entry No. | 1447 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|--|------------|-------------------|------------------|
| Blue | 954 | ON 10111 Vitamin B-5 Calcium Pantothenate 100% (19719) Standard 3 | | | |
| Cyan | 927 | 10111 Calcium Pantothenate 61237 Standard 1 | | | |
| Olive | 923 | 10111 DRM Vitamin B-5 Calcium Pantotenate 100% (Kosher) 12364 Standard 3 | | | |

| Color | File | Path | Spectrum Type |
|-------|---|--|----------------|
| Red | 40064-ON 10111 DRM Vitamin B-5 Calcium Pantothenate 1 | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS New New | Query Spectrum |



®

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Shanghai Lianlu Industrial Co., Ltd.

Certificate of Analysis

No: C04202111003A(Page1)

品名 Product Name: 吡哆醛-5-磷酸酯 Pyridoxal-5-Phosphate

批号 Batch No.: C042111803

批量 Batch Size:500kg

生产日期 Mfg.Date: Oct.29,2021

复验日期 Retest Date:Oct.29,2024

报告日期 Report Date: Nov.07,2021

包装 Packing Size: 25kg/Drum

| 项目 Item | 标准 Specification | 结果 Result | 分析方法 Analysis Method |
|--------------------------|---|--------------|-------------------------|
| 性状 Description | 浅黄色或类白色粉末 slightly yellow or off-white powder | conforms | Visual |
| 鉴别 Identification | The retention time of the major peak of product corresponds to that of the standard | conforms | CP <0512> |
| 溶解度 Solubility | Very slightly soluble in water, soluble in alkali-OH Soln. | conforms | CP General Notices |
| 熔点 Melting point | 140~145℃ | 143℃ | CP<0612> |
| 水分 Water by KF | ≤ 10.0% | 8.2% | CP<0832> |
| 重金属 Heavy metals | ≤ 10ppm | < 10ppm | CP<0821> |
| 镉 Cadmium | ≤ 0.5ppm | < 0.01ppm | CP<0412> |
| 砷 Arsenic | ≤ 1.5ppm | < 0.040ppm | CP<0412> |
| 铅 Lead | ≤ 0.5ppm | < 0.1ppm | CP<0412> |
| 汞 Mercury | ≤ 0.1ppm | < 0.010ppm | CP<0412> |
| pH 值 pH (in 0.25% water) | 2.6~3.0 | 2.9 | CP<0631> |
| 目数 Particle size (Mesh) | 90% through 30 mesh | conforms | CP<0982> |
| 游离维生素 B6 Free Vitamin B6 | ≤0.05% | 0.01% | CP<0512> |

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www.appglobalinc.com
Tel: (909) 598-1767



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Shanghai Lianlu Industrial Co., Ltd.

Certificate of Analysis

No: C04202111003A(Page2)

品名 Product Name: 吡哆醛-5-磷酸酯 Pyridoxal-5-Phosphate

批号 Batch No.: C042111803

批量 Batch Size: 500kg

生产日期 Mfg.Date: Oct.29,2021

复验日期 Retest Date: Oct.29,2024

报告日期 Report Date: Nov.07,2021

包装 Packing Size: 25kg/Drum

| 项目 Item | 标准 Specification | 结果 Result | 分析方法 Analysis Method |
|---|---------------------|--------------|-------------------------|
| 松密度 Bulk density | — | 0.32g/ml | USP<616> |
| 紧密度 Tapped density | — | 0.64g/ml | USP<616> |
| 残留溶剂 Residual Solvents | Complies to USP38 | | |
| 甲苯 Toluene | ≤890ppm | Not Detected | CP<0861> |
| 乙醇 Ethanol | ≤5000ppm | 45ppm | CP<0861> |
| 含量 Assay (on dry basis) | 98.5~101.0% | 99.6% | CP<0512> |
| 微生物检测 Microbe. Test: | | | |
| 细菌总数 Total Plate Count | ≤1000CFU/g | <10CFU/g | CP<1105> |
| 酵母菌及霉菌 Yeast & Mold | ≤100CFU/g | <10CFU/g | CP<1105> |
| 沙门氏菌 Salmonella | Negative | Negative | CP<1106> |
| 大肠杆菌 E.Coli | Negative | Negative | CP<1106> |
| 金黄色葡萄球菌 Staphylococcus Aureus | Negative | Negative | CP<1106> |
| 结论: 本品符合企业标准 Conclusion: The product conform to the enterprise standard. | | | |

包装和贮存 Packing and Storage: 500kg packed in 5kg/Bag, 25kg/Drum, and one transparent PE bag and one black PE bag and one aluminum foil bag in side.Store in well-closed, light-resistant containers, the temperature should between 5 to 10℃.

标签信息 Label information: Product name, Batch No., Net weight, GWT, TWT, Manufacturer.

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Certificate of Analysis

Sample Information

CTLA ID: 61530
Date Received: 11/2/2022
Sample Name: 10223 Pyridoxal 5 Phosphate (P5P)
Lot Number: 42947
Customer: Origin Nutraceutical

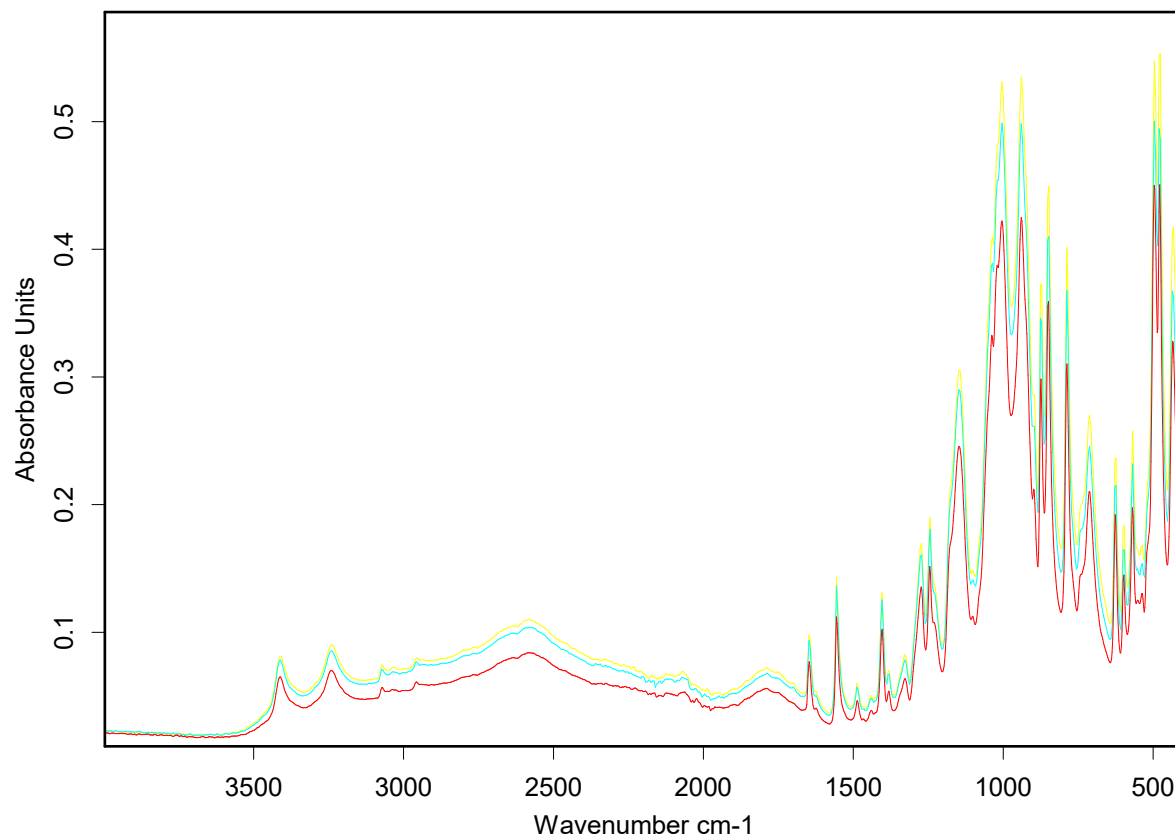
| Analysis | Method | MDL | Specification | Result | Units |
|---|--------------|------|---------------|----------|-------|
| Rapid Complete Micro | | | | | |
| Total Plate Count | USP <2021> | 100 | Report | <100 | cfu/g |
| Total Coliforms | USP <2021> | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | | Report | Negative | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Report | Negative | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |
| Vitamin B6 (Pyridoxal 5 Phosphate) | HPLC | 0.18 | Report | 101.43 | % |

11/10/2022
DATE



Quality Manager

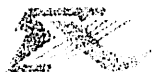
Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.



| | |
|---------------------|--|
| Product Number | 10223 Pyridoxal Phosphate 61403 Standard 1 |
| Entry No. | 227 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|---|------------|-------------------|------------------|
| | 971 | 10223 Pyridoxal-E-Phosphate 1017 Standard 2 | | | |
| | 961 | 10223 Pyridoxal Phosphate 61403 Standard 1 | | | |

| Color | File | Path | Spectrum Type |
|-------|--|--|----------------|
| | 53617-ON 10223 DRM Pyridoxal 5 Phosphate (P5P) (42947) | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS | Query Spectrum |



江西天新药业股份有限公司
JIANGXI TIANXIN PHARMACEUTICAL CO.,LTD

CERTIFICATE OF ANALYSIS

AIDP INC.
Product Code:B0604E

COUNTRY OF ORIGIN: CHINA

Product name: Biotin

Batch No.: BN21071013

| | | | |
|--------------------|--------------|----------------|-----------------|
| Manufacturing date | Jul 14, 2021 | Reporting date | Jul 20, 2021 |
| Retest date | Jul 13, 2024 | Article No. | 10102 |
| Package | 1 kg per tin | Package size | Φ140 × 220 (mm) |
| Quantity | 100 kg | | |

| Test item | Specification | Method | Result |
|--|---|---------------|------------|
| Description | Practically white, crystalline powder | USP2021 | Comply |
| Identification | | | |
| -IR | Consistent with the Reference IR spectrum | USP2021 | Comply |
| -Specific rotation | +89° ~ +93° | USP2021 | +90.4° |
| -Retention time | Retention time of the major peak corresponds to that of the standard solution | USP2021 | Comply |
| Related compounds | | | |
| -Individual impurity | ≤1.0% | USP2021 | 0.05% |
| -Total impurities | ≤2.0% | USP2021 | 0.05% |
| Assay | 97.5% ~ 102.0% | USP2021 | 99.8% |
| Heavy metals | | | |
| -Lead | ≤0.5 mg/kg | AAS, in-house | <0.5 mg/kg |
| -Cadmium | ≤0.5 mg/kg | AAS, in-house | <0.5 mg/kg |
| -Arsenic | ≤0.5 mg/kg | AAS, in-house | <0.5 mg/kg |
| -Mercury | ≤0.1 mg/kg | AAS, in-house | <0.1 mg/kg |
| Microbials | | | |
| -Total Aerobic Microbial Count | NMT 100 CFU/g | ChP2020 | <100 CFU/g |
| -Total Yeasts and Moulds Count | NMT 10 CFU/g | ChP2020 | <10 CFU/g |
| -E. Coli | Negative | ChP2020 | Negative |
| -Salmonella | Negative | ChP2020 | Negative |
| -S. Aureus | Negative | ChP2020 | Negative |
| Conclusion: This batch complies with USP 2021 and additional requirements for heavy metals and microbials. | | | |
| Remark: Store in tight containers. | | | |

Reported by: 吕静

Approved by: ZP7

Add.: Le'anjiang Industrial Zone,
Leping, Jiangxi, 333300, China

Tel: +86-798-6702928
Fax: +86-798-6702928

Certificate of Analysis

Sample Information

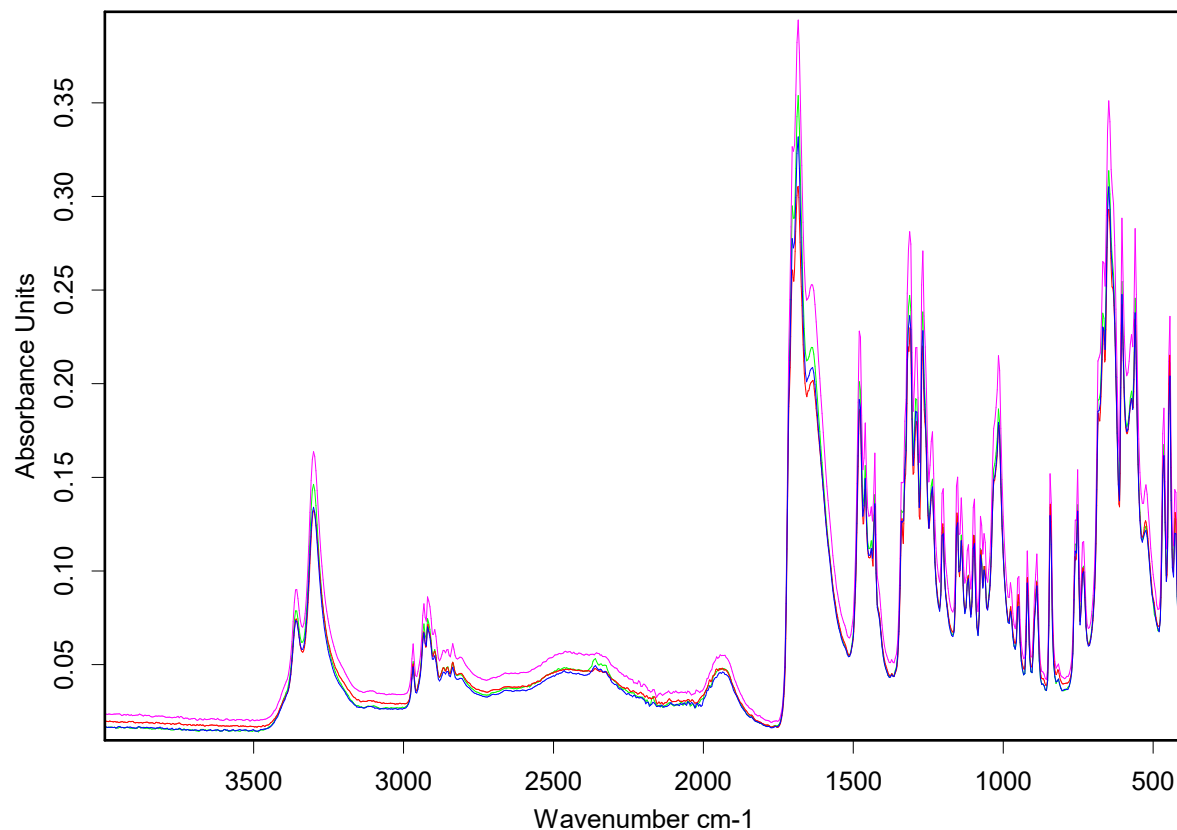
CTLA ID: 61529
Date Received: 11/1/2022
Sample Name: 10197 Biotin 100%
Lot Number: 42529
Customer: Origin Nutraceutical

| Analysis | Method | MDL | Specification | Result | Units |
|-------------------------------------|--------------|-------|---------------|----------|-------|
| Rapid Complete Micro | | | | | |
| Total Plate Count | USP <2021> | 100 | Report | <100 | cfu/g |
| Total Coliforms | USP <2021> | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | | Report | Negative | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Report | Negative | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |
| Vitamin B7 (Biotin) | HPLC | 0.303 | Report | 98.953 | % |

11/9/2022
DATE


Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.



| | |
|---------------------|-------------------------------------|
| Product Number | 10197 Biotin 100% 1274 Standard 3 |
| Entry No. | 568 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|------------------------------------|------------|-------------------|------------------|
| | 975 | 10197 Biotin 319-B0604B Standard 2 | | | |
| | 968 | 10197 Biotin 60061 Standard 1 | | | |
| | 964 | 10197 Biotin 100% 1274 Standard 3 | | | |

| Color | File | Path | Spectrum Type |
|-------|---|--|----------------|
| | 52222-ON 10197 DRM Biotrin 100% (42529).0 | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS | Query Spectrum |

CERTIFICATE of ANALYSIS

Product: L-Methylfolate Calcium

Product ID: LMETCA001

CAS: 151533-22-1

Batch: MTF220702

Origin: China

Production Date: 07/02/2022

Analysis Date: 07/02/2022

Expiration Date: 07/01/2024

| Physical/Chemical Control | Specification | Result | Test Method |
|---------------------------|--|----------|--------------------|
| Appearance | Powder | Conforms | Visual |
| Assay | Calcium (Ca): 7.0 - 8.5% (Dried Basis) | 8.1% | Titration (USP 43) |
| | 95.0 - 102.0% (Dried Basis) | 99.3% | HPLC (USP 43) |
| Boron (B) | ≤ 50 ppm | Conforms | USP <233> |
| Bulk Density | 0.4 - 0.6 g/ml | Conforms | Weighing |
| Chloride (Cl) | ≤ 0.5% | 0.05% | USP <233> |
| Color | Whitish or yellowish | Conforms | Visual |
| Enantiomeric Purity | D-5-methyltetra hydrofolate: ≤ 1.0% | 0.09% | USP 43 |
| Identification | IR: Positive | Conforms | USP 43 |
| Moisture/Water | 6.0 - 17.0% | 10.6% | USP <921> |
| Odor | Characteristic | Conforms | Organoleptic |
| Particle/Mesh Size | 80 mesh: ≥ 90% | Conforms | Mesh Screen |
| Related Substances | Folic acid: ≤ 0.5% | 0.13% | USP 43 |
| | 7,8-Dihydrofolic acid: ≤ 0.5% | 0.06% | USP 43 |
| | (6R & 6S)-Mefox: ≤ 1.0% | 0.04% | USP 43 |
| | 4-Aminobenzoylgluta-mic acid: ≤ 0.5% | 0.01% | USP 43 |
| | 4a-Hydroxy-5-methyltetrahydrofolic: ≤ 1.0% | 0.01% | USP 43 |
| | 5,10-Methylenetetrahydrofolic: ≤ 0.5% | 0.02% | USP 43 |
| | 5-Methyltetrahydro p teroic acid: ≤ 0.5% | 0.01% | USP 43 |
| | Tetrahydrofolic acid: ≤ 0.5% | 0.05% | USP 43 |
| | Dimethyltetrahydrofolic acid: ≤ 0.15% | 0.03% | USP 43 |
| | Total Related Compounds ≤ 2.5% | 1.13% | USP 43 |
| Residual Solvents | Ethanol: ≤ 5,000 ppm | 325 ppm | USP <467> |
| | 2-Propanol: ≤ 5,000 ppm | 56 ppm | USP <467> |
| Taste | Characteristic | Conforms | Organoleptic |

Heavy Metal Control

| | | | |
|---------------|-----------|----------|-----------|
| Arsenic (As) | ≤ 1.5 ppm | Conforms | USP <233> |
| Cadmium (Cd) | ≤ 0.5 ppm | Conforms | USP <233> |
| Heavy Metals | ≤ 10 ppm | Conforms | USP <233> |
| Lead (Pb) | ≤ 1 ppm | Conforms | USP <233> |
| Mercury (Hg) | ≤ 1.5 ppm | Conforms | USP <233> |
| Platinum (Pt) | ≤ 10 ppm | Negative | USP <233> |

Microbiological Control

| | | | |
|-------------------|---------------|-------------|----------|
| E. coli | Negative /10g | Conforms | USP <62> |
| S. aureus | Negative /10g | Conforms | USP <62> |
| Salmonella | Negative /10g | Conforms | USP <62> |
| Total Plate Count | ≤ 1,000 cfu/g | < 100 cfu/g | USP <61> |
| Yeast & Mold | ≤ 100 cfu/g | < 10 cfu/g | USP <61> |

Further Information

| | |
|-------------------|------------------------------------|
| Carrier/Excipient | None |
| Solubility | Slight soluble in water |
| Solvent Used | NaBH4 & HCl & Ethanol & 2-Propanol |

Starting Material(s): FA Base

Reviewed By: Marcia Zhang
Marcia Zhang

*The information presented is a direct translation of the manufacturer's COA, independent lab analysis or combination thereof and should not be solely used as an instrument for strict quality control. It is the responsibility of the user to perform their due diligence prior to its intended use, including review of existing patent or copyrights.



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OF AMERICA

Certificate of Analysis

Sample Information

CTLA ID: 61224
Date Received: 10/26/2022
Sample Name: 10464 DRM L-Methyltetrahydrofolate Calcium (L-5-MTHF)
Lot Number: 45388
Customer: Origin Nutraceutical

| Analysis | Method | MDL | Specification | Result | Units |
|-------------------------------------|--------------|-----|---------------|----------|-------|
| ID, Rapid Complete Micro Combo | | | | | |
| ID | FTIR | | Report | 95 | % |
| Total Plate Count | USP <2021> | 100 | Report | <100 | cfu/g |
| Total Coliforms | USP <2021> | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | | Report | Negative | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Report | Negative | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |

11/10/2022
DATE


Quality Manager

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Certificate of Analysis

Sample Information

CTLA ID: 65456
Date Received: 1/4/2023
Sample Name: 10464 DRM L-Methyltetrahydrofolate Calcium (L-5-MTHF) (100%)
Lot Number: 45388 / 46133
Customer: Origin Nutraceutical

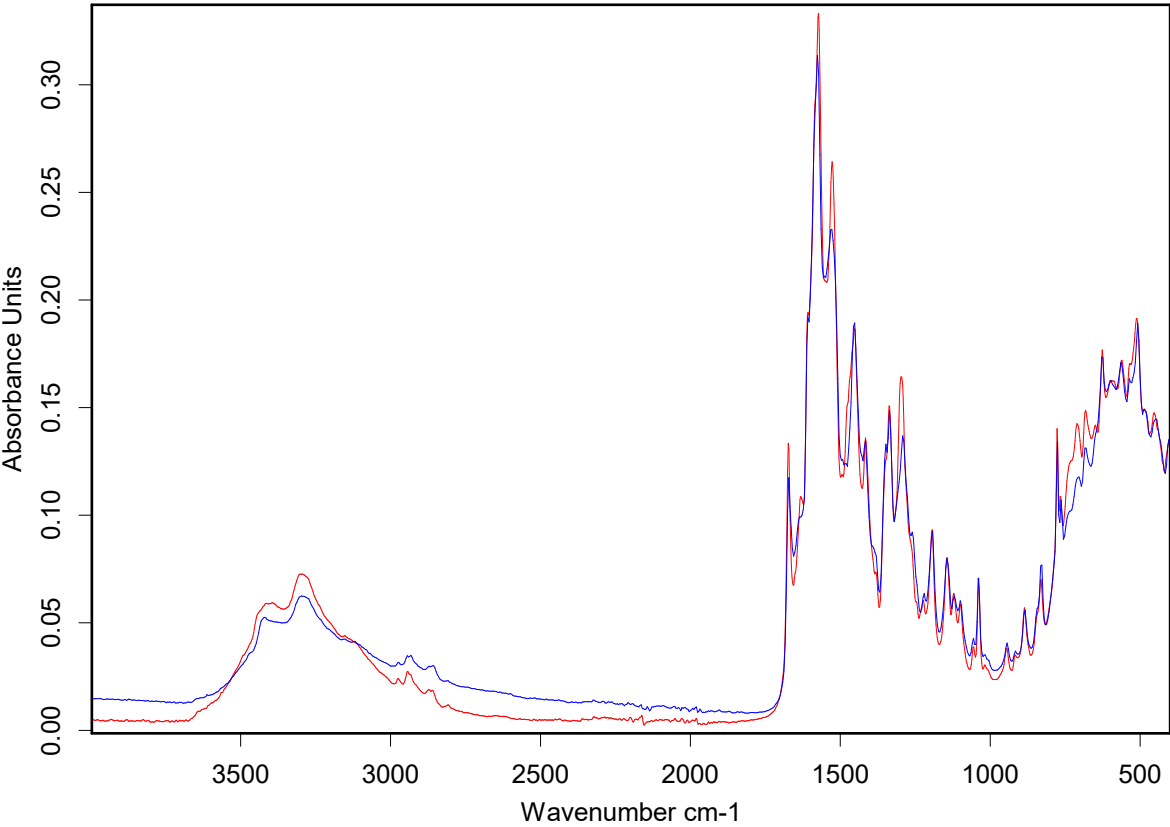
| Analysis | Method | MDL Specification | Result | Units |
|----------------------------|--------|-------------------|---------|-------|
| L-5 Methyltetrahydrofolate | HPLC | 0.0592 Report | 100.484 | % |

1/12/2023

DATE


Quality Manager

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| | |
|---------------------|---|
| Product Number | ON 10464 L-Methyletrahydrofolate Calcium (I |
| Entry No. | 1998 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|---|------------|-------------------|------------------|
| | 950 | ON 10464 L-Methyletrahydrofolate Calcium (I-5) 24340 Standard 2 | | | |

| Color | File | Path | Spectrum Type |
|-------|--|--|----------------|
| | 61224-ON 10464 DRM L-Methyltetrahydrofolate Calcium (L | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS | Query Spectrum |

Hebei North China Pharmaceutical - Huaheng

Xingyuan Street Biological Industry Zone Nanbaishe Town, Zhao County,
Shijiazhuang Hebei, China

Certificate of Analysis

| | | | |
|----------------------------|--|-----------------------|-------------------|
| Product | Cobamamide (Adenosylcobalamin, Co-Enzyme V-B12) | Ref. Standard: | CP 2015 |
| | | Batch / Lot # | X190901 |
| CAS # (Active) : | 13870-90-1 | MFG Date | 09/11/2019 |
| Formula (Active): | C ₇₂ H ₁₀₀ CoN ₁₈ O ₁₇ P | Retest Date | 09/10/2024 |
| PAT Item # : | 30-8117 | Batch Size | 10.57 KG |
| Country of Origin : | CHINA | Pack Size | 100 grams / Tin |

| Analysis Contents | Specification | Methods | Results |
|------------------------|---|----------|-------------------|
| DESCRIPTION | Dark red crystals or powder | Visual | Conform |
| IDENTIFICATION | UV, Maxima absorption @ 264nm | UV | Conform |
| | Maxima absorption @ 285 nm | UV | Conform |
| | Maxima absorption @ 305 nm | UV | Conform |
| | Maxima absorption @ 460 nm | UV | Conform |
| | HPLC | HPLC | Conform |
| | IR, infrared absorption meeting standard | IR | Conform |
| ARSENIC | ≤ 3 PPM | In-House | < 3 PPM |
| CADMIUM | ≤ 1 PPM | In-House | < 1 PPM |
| LEAD | ≤ 1 PPM | In-House | < 1 PPM |
| MERCURY | ≤ 0.1 PPM | In-House | < 0.1 PPM |
| HYDROXOCOBALAMIN | A460 / A352 ≥ 0.90 | UV | 0.98 |
| RELATED SUBSTANCES | ≤ 1.0% | HPLC | 0.9% |
| RESIDUAL SOLVENT | Acetone, ≤ 0.5% | GC | 0.008 |
| | Ethanol, ≤ 0.5% | GC | < 0.5% |
| LOSS ON DRYING (%) | ≤ 12.00% | In-House | 7.10% |
| ASSAY (on dried basis) | 98.00% ~ 102.00% | HPLC | 99.30% |
| MICROBIOLOGY | | | |
| TOTAL PLATE COUNT | ≤ 1,000 CFU / Gram | CP | < 1000 CFU / Gram |
| YEAST & MOLD | ≤ 100 CFU / Gram | CP | < 100 CFU / Gram |
| COLIFORMS | Negative | CP | Negative |
| E. COLI | Negative | CP | Negative |
| STAPH. AUREAUS | Negative | CP | Negative |
| SALMONELLA | Negative | CP | Negative |
| CONCLUSION | The above product conforms to listed standard(s) | | |

QC Department

Verified by:

K.Y.

Analyst:

J.J.

Date:

12/10/2019

Date:

12/10/2019

Certificate of Analysis

Sample Information

CTLA ID: 13815
Date Received: 1/2/2020
Sample Name: 10466 Adenosylcobalamin USP (Vitamin B-12)
Lot Number: 21102
Customer: Origin Nutraceutical

| Analysis | Method | MDL Specification | Result | Units |
|--------------------------------------|-------------|-------------------|----------|-------|
| D, Rapid Complete Micro Combo | | | | |
| ID | FTIR | Report | >95 | % |
| Total Plate Count | USP <2021> | 100 Report | 200 | cfu/g |
| Total Coliforms | BAM CH.4 | 10 Report | <10 | cfu/g |
| <i>Escherichia coli</i> | USP <2022> | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | Report | Negative | |
| <i>Staphylococcus aureus</i> | USP <2022> | Report | Negative | |
| Rapid Yeast and Mold | AOAC 997.02 | 10 Report | <10 | cfu/g |
| *TIR Spectra | FTIR | Report | Attached | |

1/6/2020

DATE


Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDI = Method Detection Limit

Certificate of Analysis

Sample Information

CTLA ID: 65457
Date Received: 1/4/2023
Sample Name: 10466 DRM Adenosylcobalamin USP (100%)
Lot Number: 21102
Customer: Origin Nutraceutical

| Analysis | Method | MDL Specification | Result | Units |
|---------------------------------|--------|-------------------|--------|-------|
| Vitamin B12 (Adenosylcobalamin) | HPLC | 0.227 Report | 82.629 | % |

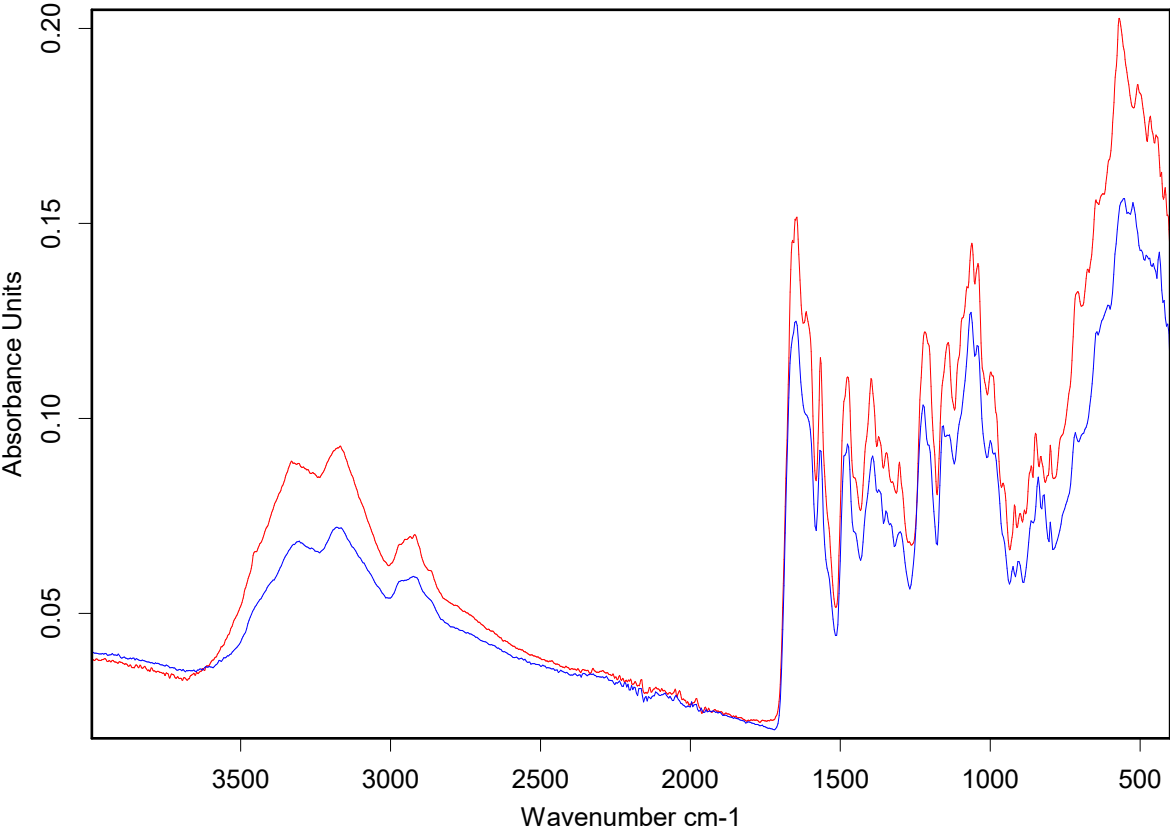
Amended report: Tests removed

1/13/2023

DATE


Quality Manager

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| | |
|---------------------|--|
| Product Number | ON 10466 Adenosylcobaolaniu Z1102 Standa |
| Entry No. | 1866 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|--|------------|-------------------|------------------|
| | 925 | ON 10466 Adenosylcobaolaniu Z1102 Standard 3 | | | |

| Color | File | Path | Spectrum Type |
|-------|---|--|----------------|
| | 65457-ON 10466 DRM Adenosylcobalamin USP (100%) (21 | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS | Query Spectrum |



Certificate of Analysis

| | |
|---------------------|------------------------------------|
| Product Name: | Methylcobalamin (Pure Vitamin B12) |
| Batch Number: | MCB1902002 |
| Manufacturing Date: | February, 2019 |
| Re-Test Date: | January, 2024 |
| Country of Origin: | China |

| Item | Standard | Result | Method |
|--|---|---|-----------|
| Appearance | Dark red crystals or crystalline powder | Dark red crystals or crystalline powder | Visual |
| Identification 1 UV-VIS spectrum pH2 UV-VIS spectrum pH7 | Conforms to standard Conforms to standard | Conforms to standard Conforms to standard | UV |
| Identification 2 | Positive | Positive | Chemistry |
| Clarity and Color of Solution | The solution is clear and red in color | The solution is clear and red in color | JPXVII |
| Solubility | It is sparingly soluble in water. Slightly soluble in ethanol (99.5%) and practically insoluble in acetonitrile. It is affected by light. | It is sparingly soluble in water. Slightly soluble in ethanol (99.5%) and practically insoluble in acetonitrile. It is affected by light. | JPXVII |
| Related Substances | ≤2.0% | 1.53% | HPLC |
| Individual Impurities | ≤0.5% | 0.37% | HPLC |
| Water | ≤12.0% | 10.43% | K.F |
| Assay (on anhydrous basis) | 98.0% ~ 101.0% | 98.32% | HPLC |
| Residual Solvent Acetone | NMT 5000 ppm | 2171 ppm | GC |
| Total Plate Count (Membrane filtration) | ≤100 cfu/g | ≤1 cfu/g | JPXVII |
| Staphylococcus Aureus | Negative | Negative | JPXVII |
| Salmonella | Negative | Negative | JPXVII |
| E. Coli | Negative | Negative | JPXVII |
| Bacillus Cereus | Negative | Negative | JPXVII |
| As | ≤2 ppm | Not detected | JPXVII |
| Pb | ≤0.5 ppm | Not detected | JPXVII |
| Hg | ≤0.1 ppm | ≤0.1 ppm | JPXVII |
| Cd | ≤2.0 ppm | ≤2.0 ppm | JPXVII |

Conclusion: The above results meet the factory standard

*The information contained herein is, to the best of our knowledge, correct. The data outlined and the statements are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information it is suggested that you evaluate the product on a laboratory scale prior to use in a finished product. The information contained herein should not be construed as permission for violation of patent right.

Certificate of Analysis

Sample Information

CTLA ID: 36292
 Date Received: 7/26/2021
 Sample Name: 10325 DRM Vitamin B-12 Methylcobalamin 100%
 Lot Number: 37430
 Customer: Origin Nutraceutical

| Analysis | Method | MDL | Specification | Result | Units |
|---------------------------------------|--------------|-----|---------------|----------|-------|
| ID, Rapid Complete Micro Combo | | | | | |
| ID | FTIR | | Report | >95 | % |
| Total Plate Count | USP <2021> | 100 | Report | <100 | cfu/g |
| Total Coliforms | BAM CH.4 | 10 | Report | <10 | cfu/g |
| <i>E. coli</i> | USP <2022> | | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | | Report | Negative | |
| <i>Staphylococcus aureus</i> <2022> | USP <2022> | | Report | Negative | |
| Rapid Yeast and Mold | AOAC 2014.05 | 10 | Report | <10 | cfu/g |
| Vitamin B12 (Methylcobalamin) | HPLC | | >98.5 | 97.354 * | % |

8/6/2021
DATE



Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.

Certificate of Analysis

Sample Information

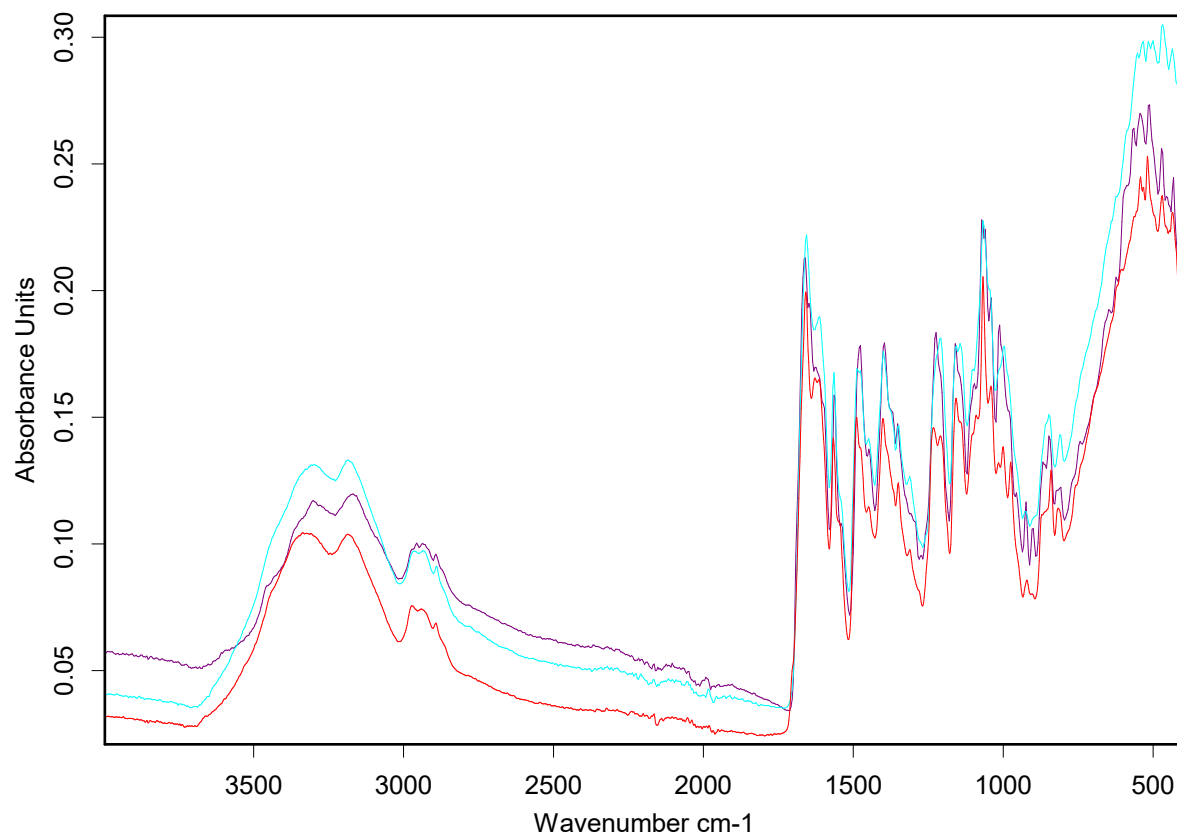
CTLA ID: 65455
Date Received: 1/4/2023
Sample Name: 10325 DRM Vitamin B-12 Methylcobalamin 100%
Lot Number: 37430
Customer: Origin Nutraceutical

| Analysis | Method | MDL Specification | Result | Units |
|-------------------------------|--------|-------------------|--------|-------|
| Vitamin B12 (Methylcobalamin) | HPLC | 0.219 Report | 95.265 | % |

1/12/2023
DATE


Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.



| | |
|---------------------|---|
| Product Number | 10325 Methylcobalamin 100% 961 Standard 2 |
| Entry No. | 503 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|---|------------|-------------------|------------------|
| | 936 | 10325 Methylcobalamin 100% 61381 Standard 1 | | | |
| | 898 | 10325 Methylcobalamin 100% 961 Standard 2 | | | |

| Color | File | Path | Spectrum Type |
|-------|--|--|----------------|
| | 36292-ON 10325 DRM Vitamin B-12 Methylcobalamin 100% | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS New New | Query Spectrum |

CERTIFICATE of ANALYSIS

Product: Zinc Picolinate 20%

Product ID: ZINCPI002-FO001

CAS: 17949-65-4

Batch: 20200524

Origin: China

Production Date: 05/24/2020

Analysis Date: 05/24/2020

Expiration Date: 05/23/2022

| Physical/Chemical Control | Specification | Result | Test Method |
|---------------------------|---------------------------------------|----------|----------------|
| Appearance | Powder | Conforms | Visual |
| Assay | Zinc (Zn): 20.0 - 23.0% (Dried Basis) | 20.3% | Volumetric/ICP |
| Color | White | Conforms | Visual |
| Identification | FTIR: Positive | Conforms | FTIR |
| Loss on Drying | ≤ 2.5% | 0.6% | USP |
| Odor | Characteristic | Conforms | Olfactory |
| Particle/Mesh Size | 60 mesh: ≥ 95% | 96.5% | Mesh Screen |
| pH | 5.0 - 8.0 | 7.0 | USP |

Heavy Metal Control

| | | | |
|--------------|-----------|----------|--------|
| Arsenic (As) | ≤ 1 ppm | 0.1 ppm | ICP-MS |
| Cadmium (Cd) | ≤ 1 ppm | 0.1 ppm | ICP-MS |
| Lead (Pb) | ≤ 1 ppm | 0.38 ppm | ICP-MS |
| Mercury (Hg) | ≤ 0.3 ppm | 0.1 ppm | ICP-MS |

Microbiological Control

| | | | |
|-------------------|---------------|----------|------------|
| E. coli | Negative/10 g | Conforms | USP <1022> |
| Salmonella | Negative/10 g | Conforms | USP <1022> |
| Staphylococcus | Negative/10 g | Conforms | USP <1022> |
| Total Plate Count | ≤ 5,000 cfu/g | 20 cfu/g | USP <1021> |
| Yeast & Mold | ≤ 100 cfu/g | 20 cfu/g | USP <1021> |

Starting Material(s): Picolinic acid, Zinc oxide

Storage: Keep in sealed container and under 25°C. Keep away from direct sunlight and moisture.

Conclusion: Product Conforms to Specifications.

Reviewed By:

Marcia Zhang
Marcia Zhang

*The information presented is a direct translation of the manufacturer's COA, independent lab analysis in combination thereof and should not be solely used as an instrument for strict quality control. It is the responsibility of the user to perform their due diligence prior to its intended use, including review of existing patent or copyright.



Contract **TESTING** Laboratories

O F A M E R I C A

Certificate of Analysis

Sample Information

CTLA ID: 20131
Date Received: 8/7/2020
Sample Name: 10536 Zinc Picolinate 20%
Lot Number: 27991
Customer: Origin Nutraceutical

| Analysis | Method | MDL | Specification | Result | Units |
|---------------------------------------|-------------|------|---------------|-------------|-------|
| ID, Rapid Complete Micro Combo | | | | | |
| ID | FTIR | | Report | >95 | % |
| Total Plate Count | USP <2021> | 100 | Report | 200 | cfu/g |
| Total Coliforms | BAM CH.4 | 10 | Report | <10 | cfu/g |
| <i>Escherichia coli</i> | USP <2022> | | Report | Negative | |
| <i>Salmonella</i> | USP <2022> | | Report | Negative | |
| <i>Staphylococcus aureus</i> | USP <2022> | | Report | Negative | |
| Rapid Yeast and Mold | AOAC 997.02 | 10 | Report | <10 | cfu/g |
| Mineral Analysis | ICP | .001 | >20 | Zinc 20.700 | % |

8/12/2020

DATE


Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.

Certificate of Analysis

Sample Information

CTLA ID: 31182
Date Received: 4/30/2021
Sample Name: 10536 Zinc Picolinate 20%
Lot Number: 27991
Customer: Origin Nutraceutical

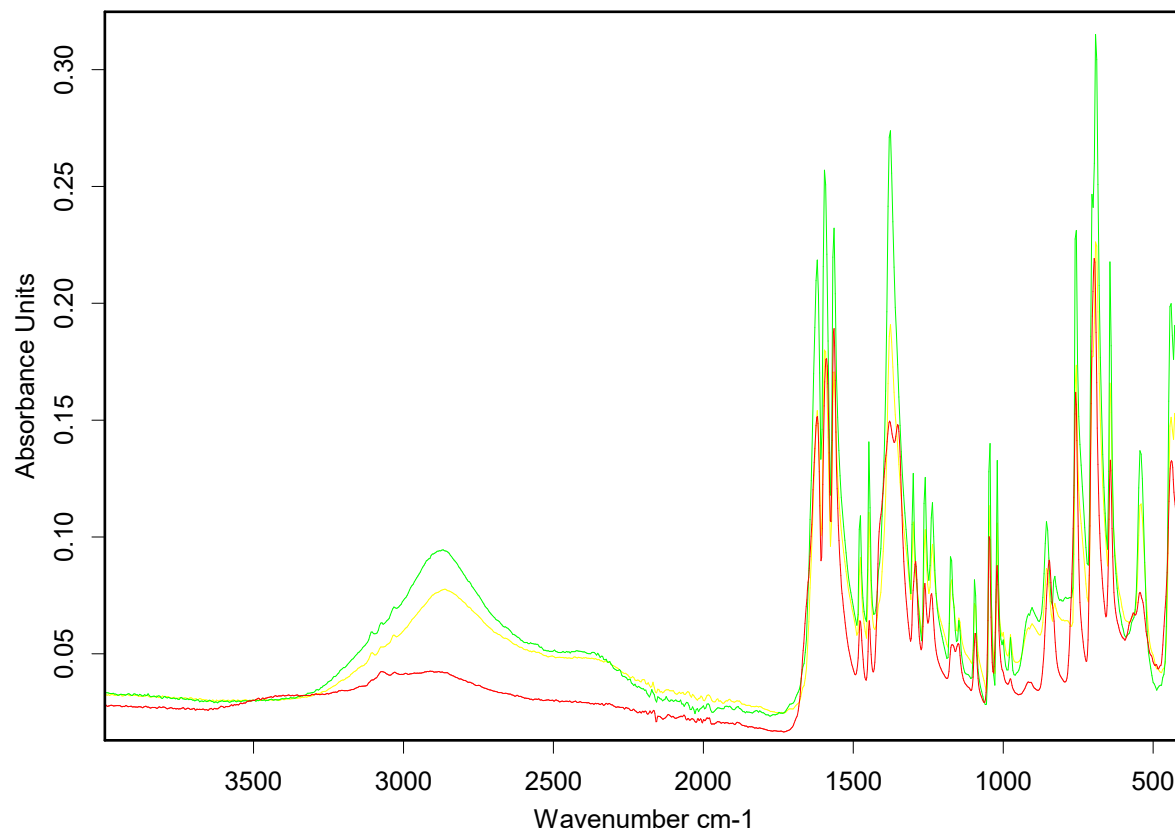
| Analysis | Method | MDL Specification | Result | Units |
|--------------|--------|-------------------|----------|-------|
| ID | FTIR | Report | >95 | % |
| FTIR Spectra | FTIR | Report | Attached | |

5/4/2021

DATE


Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.



| | |
|---------------------|--|
| Product Number | ON 10536 DRM Zinc Picolinate 20% 20583 Sta |
| Entry No. | 1828 |
| Library name | ORIGIN STANDARDS LIBRARY.S01 |
| Library description | Origin Nutraceutical |
| Copyright | Origin Nutraceutical Materials Only |
| | |

| Color | Hit Quality | Compound name | CAS Number | Molecular formula | Molecular weight |
|-------|-------------|---|------------|-------------------|------------------|
| | 857 | 10536 Zinc Picolinate 20% 3392 Standard 1 | | | |
| | 837 | ON 10536 DRM Zinc Picolinate 20% 20583 Standard 2 | | | |

| Color | File | Path | Spectrum Type |
|-------|---|--|----------------|
| | 20131- ON 10536 DRM Zinc Picolinate 20% (27991).1 | C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS New New | Query Spectrum |