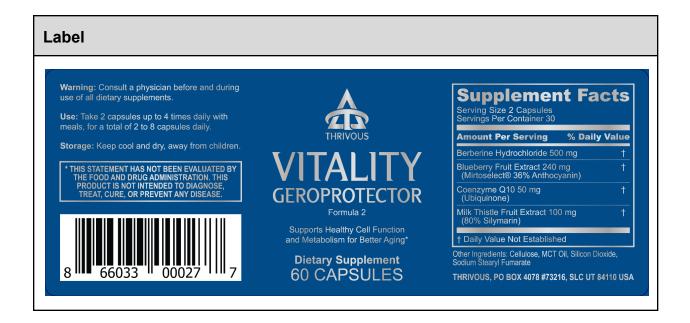


## CERTIFICATE OF ANALYSIS AND QUALITY

Product	Vitality Geroprotector
sku	VITALITY
Barcode	866033000277
Formula	2
Date	10 August 2023



Certifications
Letter of Guarantee
Good Manufacturing Practice (GMP) 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 MCT Oil Certificate of Analysis from Supplier
Excipient MCT 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 Sodium Stearyl Fumarate Certificate of Analysis from Supplier
Excipient Sodium Stearyl Fumarate Certificate of Analysis from Third-Party Testing
Berberine Certificate of Analysis from Supplier
Berberine Certificate of Analysis from Third-Party Testing
Blueberry Certificate of Analysis from Supplier
Blueberry Certificate of Analysis from Third-Party Testing
Coenzyme Q10 Certificate of Analysis from Supplier
Coenzyme Q10 Certificate of Analysis from Third-Party Testing
Milk Thistle Certificate of Analysis from Supplier
Milk Thistle Certificate of Analysis from Third-Party Testing



10 August 2023

RE: Letter of Guarantee for Thrivous Vitality Geroprotector

To whom it may concern,

The undersigned, Lincoln Cannon LLC DBA Thrivous ("Thrivous"), hereby guarantees as follows regarding Vitality Geroprotector ("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.
- 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.

LITAH DEPARTMENT O	F 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





# 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:

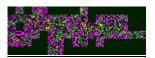
ISO/IEC 17025:2017

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):

# Chemical and Microbiological 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 Szerszer President

Perry Johnson Laboratory Accreditation, Inc. (PJLA) 755 W. Big Beaver, Suite 1325 Troy, Michigan 48084 Initial Accreditation Date: Issue Date: Expiration Date:

March 31, 2021 March 24, 2023 June 30, 2025

Accreditation No.: Certificate No.: 102267 L23-261

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.pjlabs.com



Issue: 3/2023

# Certificate of Accreditation: Supplement

#### **Contract Testing Laboratories of America**

151 E. 3450 N., Spanish Fork, UT 84660 Contact Name: Brescia Eppley 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
Microbiological F	Food, Cosmetic,	Aerobic Plate Count	AOAC 990.12	10 CFU/g
	Supplemental, and Nutraceutical	Escherichia Coli and Total Coliforms	AOAC 991.14	
		Enterobacteriaceae	AOAC 2003.01	
		Yeast and Mold	AOAC 2014.05	
		Escherichia Coli and Total Coliforms	AOAC 2018.13	
		Aerobic Plate Count	FDA BAM Ch. 3	
		Escherichia Coli and Total Coliforms	FDA BAM Ch. 4	
		Salmonella	FDA BAM Ch. 5	Presence or Absence
		Listeria Monocytogenes	FDA BAM Ch. 10	
		Staphylococcus Aureus	FDA BAM Ch. 12	
		Yeast and Mold	FDA BAM Ch. 18	100 CFU/g
		Yeast and Mold, Aerobic Plate Count	USP 2021	
		Escherichia Coli, Staphylococcus Aureus, Salmonella, Listeria Monocytogenes	USP 2022	Presence or Absence
		Aerobic Plate Count, Total Coliform, Yeast and Mold	USP <61>	100 CFU/g
		Escherichia Coli, Staphylococcus Aureus, Salmonella	USP <62>	Presence or Absence





# Certificate of Accreditation: Supplement

#### **Contract Testing Laboratories of America**

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

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

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	s granted to the facility to p SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Chemical F	Food, Cosmetic,	Arsenic, Cadmium, Lead,	USP <233>	LOD of As = $8 \text{ ppt}$
	Supplemental, and	Mercury		LOD of $Cd = 4 ppt$
	Nutraceutical			LOD of Pb = 4 ppt
		***	LICE 701	LOD of Hg = 4 ppt
		рН	USP <791>	LOQ = 0.01 %
		Caffeine	CTLA: M061	LOQ = 0.000 2907 %
		Cannabinoids:	CTLA: M052	LOQ = 0.062 5 %
		Total Cannabidiol (CBD)		
		Total		
		Tetrahydrocannabinol		
		(THC)		
		CBD		
		CBDA		
		Δ9-THC		
		THCA		
		Δ8-THC THCV		
		CBDV		
		CBDVA	7	
		CBGA		
		CBG		
		CBN		
		CBC		
		CBL		
		Mineral Analysis:	CTLA: M068	LOD for Mg, Fe, and
		Chromium (Cr)		Zn = 5.000  ppb
		Iron (Fe)		LOD for $Cr = 0.500 \text{ ppb}$
		Magnesium (Mg)		
		Zinc (Zn)		

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.



CTLA ID	79964	Sample Name	Vitality
Customer	Thrivous	Lot Number	2316301
Date Received	7/27/2023	Date Complete	8/1/2023
Customer Address:	PO Box 4078 #73216, SLC UT 84110		

ANALYSIS	SPECIFICATION	RESULT	METHOD	MDL	UNITS
Rapid Complete Micro					
Total Plate Count	Report	<100	USP<2021>	100	cfu/g
Total Coliforms	Report	<10	USP<2021>	10	cfu/g
E. coli	Report	Absent	USP<2022>		
Salmonella	Report	Absent	USP<2022>		
S. aureus	Report	Absent	USP<2022>		
Yeast & Mold	Report	<10	AOAC 2014.05	100	cfu/g
Heavy Metal					
Arsenic	Report	0.043	USP <2232>	0.001	ppm
Cadmium	Report	0.168	USP <2232>	0.001	ppm
Mercury	Report	0.181	USP <2232>	0.001	ppm
Lead	Report	0.020	USP <2232>	0.001	ppm
Berberine Hydrochloride	Report	500	By Input		mg
Blueberry Fruit Extract	Report	240	By Input		mg
Coenzyme Q10	Report	50	By Input		mg
Milk Thistle	Report	100	By Input		mg
Other Ingredients: Cellulose, MCT Oil, Silicon Dioxide, Sodium Stearyl Fumarate					

**COA Note:** 

Approved By:

**Date:** 8/1/2023



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 202 Spanish Fork, UT 84660





SUHEUNG CO., LTD.

61. Osongsængmyeong-ro, Osong-eup, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Korea 28161

## **CERTIFICATE OF ANALYSIS**

Issued date: Feb. 27, 2023

asp 100

**Product Description** 

**Empty Hard Capsule From Hypromellose (HPMC)** 

Customer:

SUHEUNG-AMERICA

U.S.A

Manufacturing Date:

Nov. 10, 2022

Capsule Type:

EMBO CAPS\*

VG-Pro "Kosher and Halal Certified"

**Expiration Date:** 

Nov. 09, 2027

Capsule Item No.:

VP0A051A051

Quantity:

15,500,000 PCS ( 155 Cartons)

Lot Number:

VP0A051A051 - 223825

Hypromellose

Product Code:

Color

Carton No.: 1 - 155

Hypromellase

Product Size:

CAP

A051 (CLEAR)

**BODY** 

Body

asp 100

A051 (CLEAR)

Composition

Cap

	17) Protituitose	420.00	body hypror	Heliose	dah ioo
Analytical Re	sults				
I	est Items	<u>Unit</u>	Standard	Results	Test Method
Length	Сар	mm	10.3 ~ 11.1	10.7	In-house Spec.
	Body	mm	18.0 ~ 18.8	18.4	In-house Spec.
Weight		mg	84.6 ~ 105.4	95.0	in-house Spec.
Identification	of Hypromellose*		Positive	Positive	USP/EP
Disintegration		min/sec	NMT 15	13'50 <b>"</b>	USP/EP
Loss on Drying		%	3.0~7.0	5.9	USP/EP
Residue on Igni	ition (Ash)*	<b>%</b>	NMT 3.0	0.7	USP/EP
TAMC		CFU/g	NMT 500	<10	USP/EP
TYMC		CFU/g	NMT 100	<10	USP/EP
E.Coli			Negative/10g	Negative	USP/EP
Salmonella			Negative/10g	Negative	USP/EP
Staphylococcus	s aureus		Negative/10g	Negative	USP/EP
Pseudomonas:	aeruginosa		Negative/10g	Negative	USP/EP

<sup>\*</sup> Reduced frequency testing

#### Elemental Impurities

Suheung Empty Hard Capsules comply with ICH Q3D for elemental impurities and meeting below acceptance level.

Elemental impurities test results based on continuous monitoring program.

		ng program.
Elemente	Unit	Acceptance level
Arsenic	ppm	NMT 1.0
Lead	ppm	NMT 1.0
Cadmium	ppm	NMT 0.5
Mercury	ppm	NMT 0.1
Cobalt	ppm	NMT 5
Vanadium	ppm	NMT 10
Nickel	ppm	NMT 20

ingredients List

1131.4410.114				
Ingredients Name	E.Nr	CLNr	Function	Regulatory Reference
Hypromellose			Structure	EP, JP, USP/NF

<sup>-</sup> Storage Conditions: recommended 15~25°C and 35~65%RH

12427 **Quality Assurance Manager** 

\* ORDER NO. HC7029

<sup>-</sup> We, Suheung Co., Ltd., hereby certify that the Empty Hard Capsules manufactured by us are free from Preservatives and no Ethylene Oxide or/and Irradiation Treatment.



## **Sample Information**

CTLA ID: 76054

Date Received: 6/7/2023

Sample Name: 10032 Capsule, HPMC, 0, Clear

Lot Number: 47932

Customer: Origin Nutraceutical

Analysis	Method	MDL Specification	Result	Units
ID	FTIR	Report	95.7	%
FTIR Spectra	FTIR	Report	Attached	

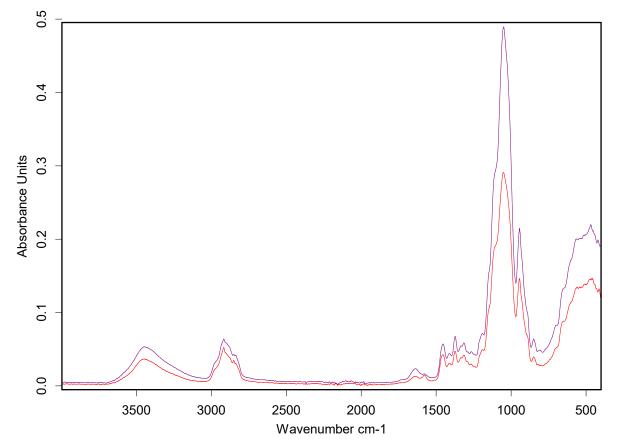
6/12/2023

Specifications provided by the Customer. Results with an asterisk (\*) denote Specifications should be reviewed by the Customer.

This Certificate of Apalysis represents data for the sample submitted and does not constitute a quarantee of quality for the entire p

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)

Search Library 6/8/2023 12:58:07 PM



Product Number	10032 Capsule HPMC0
Entry No.	131
Library name	RM TEST.S01
Library description	Testing of Raw Materials
Copyright	User library

Color	Hit Quality	Compound name	CAS Number	Molecular formula	Molecular weight
	957	10032 Capsule HPMC0			

Color	File	Path	Spectrum Type
	76054-ON 10032 Capsule HPMC 0 Clear (47932).0	C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\DATA\MEAS	Query Spectrum



Material#: 26154

Material Name: MCT Oil

Allergens: None

Batch: F060822-26154

Mfg. Date: 06/08/2022

Retest Date: 06/08/2025

Characteristic	Units	Value	Specifications	Test Method
Acid Value	mg KOH/g	0.02	Max 0.1	AOCS Te 2a-64
Saponification Value	mg KOH/g	334	Min. 325 Max. 345	AOCS Tl 1a-64
Iodine Value	$gI_2/100g$	0.03	Max. 0.5	AOCS Tg 1a-64
Hydroxyl Value	mg KOH/g	3	Max. 5	AOCS Cd 13-60
Peroxide Value	meq/kg	NIL	Max. 1	AOCS Cd 8-53
C8 Caprylic Acid	%	59.1	Min. 55 Max. 65	ISO 12966-2
C10 Capric Acid	%	40.7	Min. 35 Max. 45	ISO 12966-2
C12 Lauric Acid	%	0.1	Max. 1	ISO 12966-2
Chromium	ppm	< 0.05	Max. 0.05	ICPMS
Copper	ppm	< 0.1	Max. 0.1	ICPMS
Lead	ppm	< 0.1	Max. 0.1	ICPMS
Nickel	ppm	< 0.1	Max. 0.1	ICPMS
Tin	ppm	< 0.1	Max. 0.1	ICPMS
*Typical Microbial D	ata:			
Aerobic Plate Count	cfu/g	<10	Max. 5000	FDA-BAM
E. Coli	cfu/g	<10	Max. 10	FDA-BAM
Yeast & Mold	cfu/g	<10	Max. 100	FDA-BAM
Salmonella * testing is done on an annu	cfu/g nal basis	Negative	Negative	FDA-BAM

Results Reviewed by	Results Verified by
Signature: Lexi Zaremba	Signature Outh Kingsburg
Print Name: Lexi Zaremba	Print Name: Arielle Klingenberg
Date: 06/08/2022	Date: 6/29/22



## **Sample Information**

CTLA ID: 69969

Date Received: 3/14/2023

Sample Name: 10842 MCT Oil 100%

Lot Number: 44891

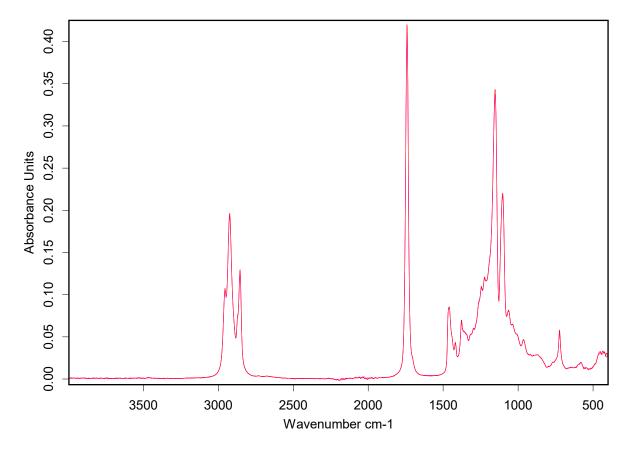
Customer: Origin Nutraceutical

Analysis	Method	MDL Specification	Result	Units
ID, Rapid Complete Micro Combo				
ID	FTIR	Report	99.6	%
Total Plate Count	USP <2021>	100 Report	<100	cfu/g
Total Coliforms	USP <2021>	10 Report	<10	cfu/g
E. coli	USP <2022>	Report	Absent	
Salmonella	USP <2022>	Report	Absent	
Staphylococcus aureus <2022>	USP <2022>	Report	Absent	
Rapid Yeast and Mold	AOAC 2014.05	10 Report	<10	cfu/g
FTIR Spectra	FTIR	Report		

3/16/2023

Specifications provided by the Customer. Results with an asterisk of 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)

Search Library 3/15/2023 10:50:35 AM



Product Number	ON 10842 LIQ MCT Oil 100% 18053 Standard
Entry No.	1721
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
	996	ON 10842 LIQ MCT Oil 100% 18053 Standard 1			

Color	File	Path	Spectrum Type
	69969-ON 10842 MCT Oil 100% (44891).0	C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\DATA\MEAS	Query Spectrum



Page 1 of 2

Nov 1, 2021

Aug 23, 2021

7250020313

4700100907

Aug 23, 2021

+16505952094

Martinez Jasmine

3007838922 / 000001

2004842408 / 000001

jasmine.martinez@evonik.com

**Inspection Certificate 3.1** according to EN 10204

Delivery Number / Item

Order Number / Item

**Contact Person** 

Customer no.

Your purchase order

Date

Silica

Mail

Fax

Date

Eventk 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 www.vivioninc.com Phone: (650) 595-3600, Fax: (650) 595-2094

**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

_				Specification	
Property	Test method	Unit	Value	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	foll. 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	foll. ISO 13320-1	μm	11.7	10.0	14.0

Tel.: +1-800-334-8772 www.evonik.com

# CONTract TESTING Laboratories

#### **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

Address: 151 E 3450 N
Spanish Fork, UT 84660

Date Recieved: 09/23/2022

Date Completed: 09/28/2022

COA Notes:

Sample ID: 65167

Sample Type:

Sample Name: 10030 EXC Silicon Dioxide,
Precipitated

Lot Number: 41097

## **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.



#### **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**

## **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
E. coli	USP <2022>		Report	Absent	
Salmonella	USP <2022>		Report	Absent	
Staphylococcus aureus	USP <2022>		Report	Absent	
Rapid Yeast and Mold	AOAC 2014.05	10	Report	<10	cfu/g

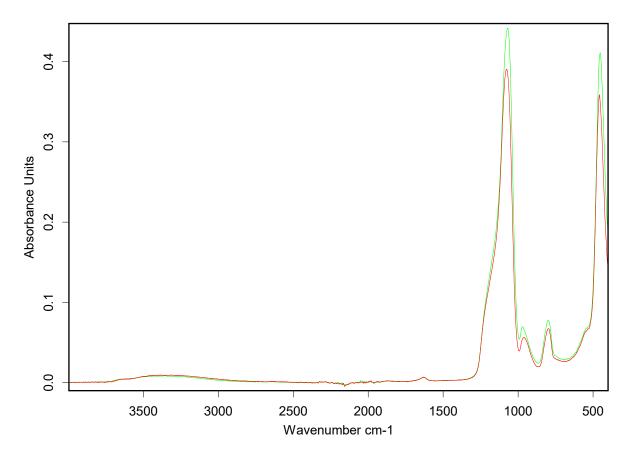
Ewi Epyl\_

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.

Search Library 9/27/2022 2:47:05 PM



Product Number	10030 Silicon Dioxide Precipitation 63211 Star
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

Page 3 of 3 Page 1 of 1



#### **PRUV®**

# Sodium Stearyl Fumarate Ph. Eur., NF, JPE

## CERTIFICATE OF ANALYSIS

Batch No:

3059

Manufacturing Site:

Polanco, Spain

Re-evaluation date

09/2024

Manufacturing date 09/2021

Description

Appearance

white or almost white, fine powder with agglomerates of flat, circular

Solubility

practically insoluble in water, slightly soluble in methanol, practically

insoluble in acetone and in ethanol

Characteristics	Specification	Lot Result	Test Reference
Identification (1) 2)	Conforms	Conforms	
Water	Max. 5.0%	3.0 %	Ph. Eur., NF. JPE
Lead <sup>1)</sup>	Max. 0.001%	< 0.001%	USP
Heavy metals	Max. 0 002%	< 0.002%	JPE
Saponification value	142.2 - 146.0	144.8	NF. JPE
Limit of Sodium stearyl maleate2)	Max. 0.25%	< 0.25 %	NF. JFE
Limit of Stearyl alcohol 2) Assav	Max. 0.5% 99.0 - 101 5%	< 0.5 %	NF
Related substances (Ph. Eur.)		100.9 %	Ph. Eur., NF, JPE
and substances (Fin. Eur.)	Largest single impurity max. 0.5%	0.3 %	Ph. Eur
Related substances (JPE)1)	Total Impurities max. 5.0%	0.5 %	Ph. Eur.
dentification (2)	Conforms	Conforms	JPE
Servincation (2)	Responds to qualitative test (1) for sodium salt	Conforms	JPE
Arsenic¹)	Max. 2 ppm	< 2 ppm	JPE
pecific Surface Area (Blaine)	1.2 - 2.0 m <sup>2</sup> /g	1.7 m <sup>2</sup> /g	Ph. Eur
desidual Solvents (GC)3)	Acetone max. 500 ppm	< 500 ppm	
	Toluene max. 890 ppm	< 890 ppm	JRS method
article size distribution	d10: max. 2.5 µm	1.4 µm	JRS method
_aser diffraction)	d50: max. 20 µm		JRS method
Results reported are expected	d90: max. 45 um	7 μm 24 μm	JRS method JRS method

1) Results reported are expected results based on historical data

2) Additional data in attachment.

3) The raw materials, manufacturing process and product do not contain any of the solvents listed in Residual Solvents (USP<467>, Ph. Eur. <5.4>) except toluene and acetone. Conformity declaration regarding the general chapters for residual solvents (USP<467>, Ph. Eur. <5.4>). Only class 2 solvent toluene and class 3 solvent acetone are likely to be present. Residual Class 2 solvent is below the option 1 limit and residual Class 3 solvent is below 0.5 per cent. PRUV® is not routinely tested for toluene as the content complies with the exemption procedure B (Class 2 solvents used prior the last step of the synthesis) in Annex I CPMP/QWP/450/03 of the Guideline CPMP/ICH/283/95

Elements listed in ICH Q3D Guideline for elemental impurities are not used in manufacturing and not analyzed per batch; detail information is available on request.

The batch described by this certificate meets the requirements of Ph. Eur., NF, and JPE monographs for "Sodium Stearyl Fumarate" current edition.

2021-12-02 Ref: JRS Pharma LP

WORLDWIDE HEADQUARTERS

JRS PHARMA GMBH & CO. KG

Helzmühle 1 : 73494 Rosenberg (Germany) Phone: +49 7967 152-312 Fax: +49 7967 152-345

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**Sample Information** 

OF AMERICA

CTLA ID:

51336

Date Received:

4/27/2022

Sample Name:

10530 DRM Exc Pruv

Lot Number:

42358

Customer:

Origin Nutraceutical

Analysis	Method	MDL Specification	Result	Units
ID .	FTIR	Report	94.10	%

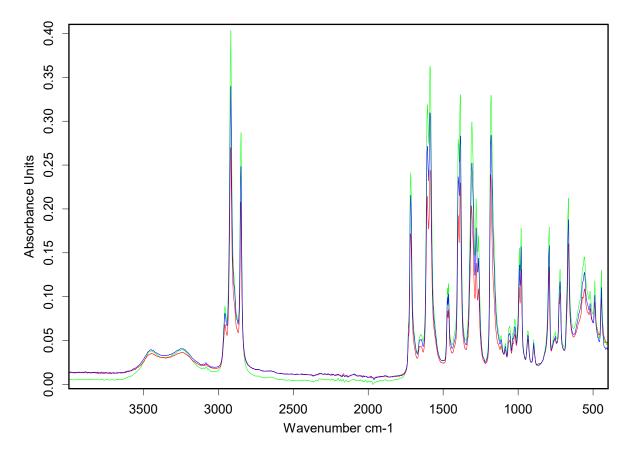
4/29/2022

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.

Search Library 1/4/2023 11:51:08 AM



Product Number	45341-ON 10530 DRM EXC PRUV 40701
Entry No.	238
Library name	COMPARISON TESTS.S01
Library description	Origin Nutraceutical
Copyright	Origin Nutraceutical Materials Only

Color	Hit Quality	Compound name	CAS Number	Molecular formula	Molecular weight
	962	45341-ON 10530 DRM EXC PRUV 40701			
	959	10530 PRUV 4862 Standard 2			

Color	File	Path	Spectrum Type
	51336-ON 10530 DRM EXC PRUV (42358).1	C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS	Query Spectrum



LA Office Phone: 1-626-538-4368 LA Office Phone: 1-626-321-0244 Email: info@fifthnutrisupply.net Fax: 1-626-538-4373 Fifth Nutrisupply FDA #: 11716071148

# Certificate of Analysis Berberine Extract HCL 97% Powder

Product Name	Berberine Extract HCL 97% Powder	Manufacture Date	2021-05-10
Batch Number	20210510	Expiration Date	2023-05-09
Plant Part	Bark	Origin of Country	China
<b>Botanical Source</b>	Berberis Aristata	Batch Quantity	1000 kg
Extraction Solvents	Ethanol/Water	Extraction Ratio	30:1

ANALYSIS	SPECIFICATION	RESULTS	TEST METHOD
Appearance	Yellow Powder	Yellow Powder	CP2005
(A) Color reaction A	Positive	Positive	CP2005
(B) Color reaction B	Positive	Positive	CP2005
(C) Color reaction B	Positive	Positive	CP2005
(4) IR	Complies to IR ref. Spectrum	Complies	CP2005
(5) Chloride	Positive	Positive	CP2005
Assay calculated on dried basis	>97.0%	>97.60%	Titration Method
Loss on drying	<12.0%	11.09%	CP2005
Particle size	100% through 80mesh sieve	Complies	CP2005
Residue on Ignition	<0.2%	0.11%	CP2010
Other Alkaloids	Meets Requirements	Meets requirements	CP2005
Heavy metals	<10ppm	<10ppm	CP2005
Lead (Pb)	<1ppm	<1ppm	CP2005
Arsenic (As)	<1ppm	<1ppm	CP2005
Mercury (Hg)	<0.1ppm	<0.1ppm	CP2005



## **Sample Information**

CTLA ID: 42554

Date Received: 11/24/2021

Sample Name: 10277 DRM Berberine 97% HCL

Lot Number: 39843

Customer: Origin Nutraceutical

Analysis	Method	MDL	Specification	Result	Units
ID, Rapid Complete Micro Combo					
ID	FTIR		Report	95.4	%
Total Plate Count	USP <2021>	100	Report	<100	cfu/g
Total Coliforms	USP <2021>	10	Report	<10	cfu/g
E. coli	USP <2022>		Report	Negative	
Salmonella	USP <2022>		Report	Negative	
Staphylococcus aureus <2022>	USP <2022>		Report	Negative	
Rapid Yeast and Mold	AOAC 2014.05	10	Report	<10	cfu/g
FTIR Spectra	FTIR		Report	Attached	

Amended report: added test

2/14/2022

DATE

Quality Manager

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**Sample Information** 

CTLA ID: 78971

Date Received: 7/14/2023

Sample Name: 10277 Berberine

Lot Number: 39843

Customer: Origin Nutraceutical

Analysis	Method	MDL Specification	Result	Units
Berberine	HPLC	0.002 Report	95.995	g/100g

7/28/2023

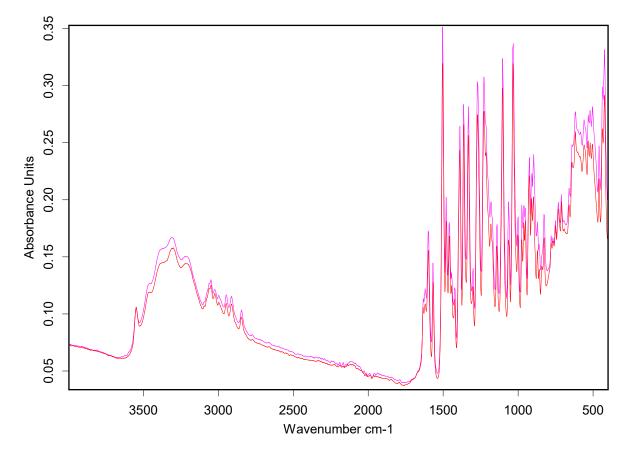
from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit. This document is not

Specifications provided by the Customer. Results with an asterisk (A) 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

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Search Library 2/14/2022 3:05:19 PM



Product Number	10277 Berberine 97% HCL 4044 Standard 3
Entry No.	791
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
	954	10277 Berberine 97% HCL 4044 Standard 3			

Color	File	Path	Spectrum Type
	42554-ON 10277 DRM Berberine 97% HCL (39843).0	C:\Users\Israel\Documents\Bruker\OPUS_7.5.18\Data\MEAS	Query Spectrum



HEADQUARTERS: Viale Ortles 12, 20139 Milan (MI) Page 1 of 2

FACTORY: Via Don Minzoni 6, 20049 Settala (MI) - ITALY

: +39-0295413.1

PRODUCT : VACCINIUM MYRTILLUS DRY EXTRACT

MIRTOSELECT (R)

CODE N. : 9042202

ANALYSIS CERTIFICATE N. : 110966/3

DESCRIPTION : BILBERRY (V.MYRTILLUS) ET.EX.36%

BATCH N. : 22S0082200

MANUFACTURE DATE :

3/2022

BATCH RELEASE DATE : 4/04/2022

RETESTING DATE :

3/2025

COA APPROVAL DATE : 4/27/2022

#### STARTING HERBAL MATERIAL

The starting herbal material has been identified against a crude drug standard or an authoritative literature source by botanical QC analyst.

Scientific Name:

Vaccinium myrtillus L.

English Common Name:

Bilberry

Botanical Family:

Ericaceae

Cultivated/Wild:

Wild

Part of the Plant Utilized:

Fruit

#### PRODUCTION

Extraction Solvent:

Ethanol and Water

Drug-to-Extract Ratio:

80-130 : 1 (native extract)

Excipients/Other Components:

None

Antioxidants/Preservatives:

Composition:

Bilberry Fresh Frozen Fruit Dry Extract, Refined and Standardised

DETERMINATION	RESULTS	SPECIFICATIONS	U.M.
HPLC CONTENTS	37.1	>= 36.0	8
Assay of total anthocyanosides			
According to TM/0334			
IPLC CONTENTS	0.29	<= 1.0	%
Assay of anthocyanidins			
According to TM/0334			
CHARACTERS/APPEARANCE	Complies	Dark red-violet powder	
OLUBILITY	Complies	Practically insoluble	
in acetone		-	
According to Ph. Eur./USP			
OLUBILITY	Complies	Practically insoluble	
in chloroform	_	_	
According to Ph. Eur./USP			
SOLUBLE SUBSTANCES	95.9	>= 95.0	8
in hydrochloric acid 0.1N			
According to TP-001			
TLC IDENTIFICATION	Complies	Complies	
According to TP-002	_	-	
PAPPED DENSITY	0.86	For Information Only	g/ml
According to Ph. Eur. 2.9.34.		-	-



HEADQUARTERS: Viale Ortles 12, 20139 Milan (MI) Page 2 of 2 FACTORY: Via Don Minzoni 6, 20049 Settala (MI) - ITALY

: +39-0295413.1 PHONE

CODE N. : 9042202

ANALYSIS CERTIFICATE N. : 110966/3

DETERMINATION	RESULTS	SPECIFICATIONS	U.M.
PARTICLE SIZE Pass 200 um (#75 Mesh) According to TM/0314	98	>= 80	8
PARTICLE SIZE Pass 100 um (#150 Mesh) According to TM/0314	82	>= 60	8
SULPHATED ASH According to Ph. Eur. 2.4.14.	0.7	<= 3.0	8
WATER (K. Fischer) According to Ph. Eur. 2.5.12. Method A	2.9	<= 4.5	8
ARSENIC	0.1	<= 1.0	ppm
ICP-MS - According to TM/0412	0.1	<= 1.0	ppm
ICP-MS - According to TM/0412			FF
CADMIUM ICP-MS - According to TM/0412	0.002	<= 0.2	ppm
MERCURY  ICP-MS - According to TM/0412	0.003	<= 0.10	ppm
RESIDUAL ORGANIC SOLVENTS According to SR2C			
Ethanol MICROBIOLOGICAL CONTROL According to harmonized EP, USP and JP regulations (Ph. Eur. 2.6.12. and 2.6.13.)	0.02	<= 0.5	8
TAMC TOTAL AEROBIC MICROBIAL COUNT	350	<= 5000	CFU/g
TYMC TOTAL COMBINED YEASTS/MOULDS COUNT	< 10	<= 500	CFU/g
BILE-TOLERANT GRAM-NEGATIVE BACTERIA	Absent	<= 100	CFU/g
ESCHERICHIA COLI	Absent	Absent	/10g
SALMONELLA	Absent	Absent	/10g
PSEUDOMONAS AERUGINOSA	Absent	Absent	/g
STAPHYLOCOCCUS AUREUS	Absent	Absent	/10g
PESTICIDES DETERMINATION Listed in USP <561>	Complies	Complies	
According to TP-005			



## **Sample Information**

CTLA ID: 74977

Date Received: 5/23/2023

Sample Name: 11234 DRM Bilberry Fruit Extract (Mirtoselect) 36% Anthocyanin

Lot Number: 48444

Customer: Origin Nutraceutical

Method	MDL	Specification	Result	Units
FTIR		Report	96.8	%
LICD <200245	100	Danart	4100	cfu/g
		•		•
	10	•		cfu/g
		•		
USP <2022>		Report	Absent	
USP <2022>		Report	Absent	
AOAC 2014.05	10	Report	<10	cfu/g
<usp 233=""></usp>	0.001	Report	0.096	ppm
<usp 233=""></usp>	0.001	Report	<0.001	ppm
<usp 233=""></usp>	0.001	Report	<0.001	ppm
<usp 233=""></usp>	0.001	Report	<0.001	ppm
LCMS	.01	Report	ND	μg/g
LCMS	.01	Report	ND	μg/g
LCMS	.01	Report	ND	μg/g
LCMS	.01	Report	ND	μg/g
LCMS	.01	Report	ND	μg/g
LCMS	.01	Report	ND	μg/g
LCMS	.01	Report	ND	μg/g
LCMS	.01	Report	ND	μg/g
LCMS	.01	Report	ND	μg/g
LCMS	.01	Report	ND	μg/g
LCMS	.01	Report	ND	μg/g
	FTIR  USP <2021> USP <2021> USP <2022> USP <2022> USP <2022> AOAC 2014.05 <usp 233=""> <usp 233=""> <usp 233=""> <usp 233="">  LCMS LCMS LCMS LCMS LCMS LCMS LCMS LCM</usp></usp></usp></usp>	FTIR  USP <2021> 100  USP <2021> 10  USP <2022>  USP <2022>  USP <2022> AOAC 2014.05 10 <usp 233=""> 0.001  <usp 233=""> 0.001  <usp 233=""> 0.001  <usp 233=""> 0.001  LCMS 0.01  LCMS 0.01</usp></usp></usp></usp>	FTIR Report  USP <2021> 100 Report  USP <2021> 10 Report  USP <2022> Report  USP <2022> Report  USP <2022> Report  AOAC 2014.05 10 Report <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0.001 Report  <usp 233=""> 0</usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp>	FTIR Report 96.8  USP <2021> 100 Report <100 USP <2021> 10 Report <10 USP <2022> Report Absent USP <2022> Report Absent USP <2022> Report Absent USP <2022> Report Absent AOAC 2014.05 10 Report <10 <usp 233=""> 0.001 Report &lt;0.096 <usp 233=""> 0.001 Report &lt;0.001 <usp 233=""> 0.001 Report &lt;0.001 <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001 Report &lt;0.001  <usp 233=""> 0.001  <usp< td=""></usp<></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp></usp>

6/12/2023

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## **Sample Information**

CTLA ID: 74977

Date Received: 5/23/2023

Sample Name: 11234 DRM Bilberry Fruit Extract (Mirtoselect) 36% Anthocyanin

Lot Number: 48444

Customer: Origin Nutraceutical

Analysis	Method	MDL	Specification	Result	Units
Chlorantraniliprole	LCMS	.01	Report	ND	μg/g
Chlorfenapyr	LCMS	.01	Report	ND	μg/g
Chlorpyrifos	LCMS	.01	Report	ND	μg/g
Clofentezine	LCMS	.01	Report	ND	μg/g
Cyfluthrin	LCMS	.01	Report	ND	μg/g
Cypermethrin	LCMS	.01	Report	ND	μg/g
Daminozide	LCMS	.01	Report	ND	μg/g
DDVP (Dichlorvos)	LCMS	.01	Report	ND	μg/g
Diazinon	LCMS	.01	Report	ND	μg/g
Dimethoate	LCMS	.01	Report	ND	μg/g
Ethoprophos	LCMS	.01	Report	ND	μg/g
Etofenprox	LCMS	.01	Report	ND	μg/g
Etoxazole	LCMS	.01	Report	ND	μg/g
Fenoxycarb	LCMS	.01	Report	ND	μg/g
Fenpyroximate	LCMS	.01	Report	ND	μg/g
Fipronil	LCMS	.01	Report	ND	μg/g
Flonicamid	LCMS	.01	Report	ND	μg/g
Fludioxonil	LCMS	.01	Report	ND	μg/g
Hexythiazon	LCMS	.01	Report	ND	μg/g
lmazal	LCMS	.01	Report	ND	μg/g
Imidacloprid	LCMS	.01	Report	ND	μg/g
Kresoxim-methyl	LCMS	.01	Report	ND	μg/g
Malathion	LCMS	.01	Report	ND	μg/g
Metalaxyl	LCMS	.01	Report	ND	μg/g
Methiocarb	LCMS	.01	Report	ND	μg/g
Methomyl	LCMS	.01	Report	ND	µg/g

6/12/2023

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## **Sample Information**

CTLA ID: 74977

Date Received: 5/23/2023

Sample Name: 11234 DRM Bilberry Fruit Extract (Mirtoselect) 36% Anthocyanin

Lot Number: 48444

Customer: Origin Nutraceutical

Analysis	Method	MDL	Specification	Result	Units
Methyl parathion	LCMS	.01	Report	ND	μg/g
MGK-264	LCMS	.01	Report	ND	μg/g
Myclobutanil	LCMS	.01	Report	ND	μg/g
Naled	LCMS	.01	Report	ND	μg/g
Oxamyl	LCMS	.01	Report	ND	μg/g
Paclobutrazol	LCMS	.01	Report	ND	μg/g
Permethrins	LCMS	.01	Report	ND	μg/g
Phosmet	LCMS	.01	Report	ND	μg/g
Piperonyl_butoxide	LCMS	.01	Report	ND	μg/g
Prallethrin	LCMS	.01	Report	ND	μg/g
Propiconazole	LCMS	.01	Report	ND	μg/g
Propoxur	LCMS	.01	Report	ND	μg/g
Pyrethrins	LCMS	.01	Report	ND	μg/g
Pyridaben	LCMS	.01	Report	ND	μg/g
Spinosad	LCMS	.01	Report	ND	μg/g
Spiromesifen	LCMS	.01	Report	ND	μg/g
Spirotetramat	LCMS	.01	Report	ND	μg/g
Spiroxamine	LCMS	.01	Report	ND	μg/g
Tebuconazole	LCMS	.01	Report	ND	μg/g
Thiacloprid	LCMS	.01	Report	ND	μg/g
Thiamethoxam	LCMS	.01	Report	ND	μg/g
Trifloxystrobin	LCMS	.01	Report	ND	μg/g
FTIR Spectra	FTIR		Report	Attached	
HPTLC	HPTLC		Report	Characteristic	

6/12/2023

Specifications provided by the Customer. Results with an asterisk (A) Tenote 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)



## **Sample Information**

CTLA ID: 74977

Date Received: 5/23/2023

Sample Name: 11234 DRM Bilberry Fruit Extract (Mirtoselect) 36% Anthocyanin

Lot Number: 48444

Origin Nutraceutical Customer:

**Analysis** Method **MDL** Specification Result Units

ND= None Detected

Amended report: added tests

**HPTLC**: Fingerprint of test solution is consistent with reference standard *vaccinium myrtillus* (bilberry extract).

6/12/2023

Specifications provided by the Customer. Results with an asterisk ( Toenote Specifications should be reviewed by the Customer.

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## **Sample Information**

CTLA ID: 76173

Date Received: 6/8/2023

Sample Name: 11234 Billbery Extract 36% (Anthocyanidins)

Lot Number: 48444

Customer: Origin Nutraceutical

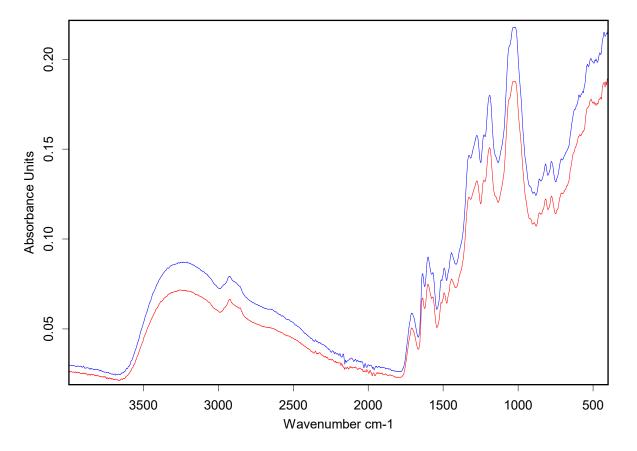
Analysis	Method	MDL Specification	Result	Units
Anthocyanidins	UV-Vis	0.002 Report	82.4	%

7/12/2023

Specifications provided by the Customer. Results with an asterisk (1) denote Specifications should be reviewed by the Customer.

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Search Library 6/2/2023 3:50:03 PM



Product Number	ON 11234 DRM Bilberry Fruit Extract (Mirtose
Entry No.	2784
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
		968	ON 11234 DRM Bilberry Fruit Extract (Mirtoselect) 36% (43219) Standard 1			

Color	File	Path	Spectrum Type
	74977-ON 11234 DRM Bilberry Fruit Extract (Mirtoselect) 3	Query Spectrum	

6439 Alondra Blvd, Paramount, CA 90723, USA Tel (562) 633 8985, Fax (562) 633 8986

Website: nutrilandgroup.com

Email: nutrilandgroup@outlook.com



February 2024

Retesting Date:

# Certificate of Analysis

Product:

Co-Enzyme Q<sub>10</sub> (Ubiquinone)

Batch:

SZFQ200299

Manufacturing Date:

February 2021

Source:

Glucose from corn

CAS:

303-98-0

Content	Specification	Results	Methods
Appearance:	Orange Crystalline powder	Conforms	Visual
Particle Size:	80 mesh	Conforms	80 mesh screen

Particle Size: 80 mesh Chemical Formula: C<sub>59</sub>H<sub>90</sub>O<sub>4</sub>

 Identification:
 Positive
 Conforms
 USP

 Assay:
 ≥99%
 99.1%
 USP

 Loss on Drying:
 <0.5%</td>
 0.01%
 USP

Melting Point: 48°C - 52°C 51-52°
Solubility: Insoluble in water Conforms

Chromatograph Purity: Impurities <1.0% Conforms USP
Ileavy Metals. <10 ppm Conforms USP
Arsenic: <1 ppm Conforms USP
Cadmium: <0.5 ppm Conforms USP

Lead: <0.5 ppm Conforms USP Mercury: Conforms <0.1 ppm USP Total Plate Count: <1,000 cfu/g Conforms USP Mold & Yeast: <50 cfu/g USP <3 cfu/g Conforms USP E. Coli: USP

E. Coli: Negative Conforms USP
Salmonella: Negative Conforms USP
Staphylococcus Aureus: Negative Conforms USP

GMO Statement: Non-GMO

Standard: USP food grade

Treatment: None Manufacturing Method: Fermented

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/ Out 12 5



## **Sample Information**

CTLA ID: 42048

Date Received: 11/17/2021

Sample Name: 10625 DRM CoQ10 100%

Lot Number: 39688

Customer: Origin Nutraceutical

Analysis	Method	MDL Specification	on Result	Units
ID, Rapid Complete Micro Combo				
ID	FTIR	Report	97.0	%
Total Plate Count	USP <2021>	100 Report	<100	cfu/g
Total Coliforms	BAM CH.4	10 Report	<10	cfu/g
E. coli	USP <2022>	Report	Negative	
Salmonella	USP <2022>	Report	Negative	
Staphylococcus aureus <2022>	USP <2022>	Report	Negative	
Rapid Yeast and Mold	AOAC 2014.05	10 Report	<10	cfu/g
FTIR Spectra	FTIR	Report	Attached	
CoEnzyme Q10	HPLC	0.002 Report	100.600	%

11/23/2021

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.



**Sample Information** 

CTLA ID: 78970

Date Received: 7/14/2023

Sample Name: 10625 CoQ10

39688 Lot Number:

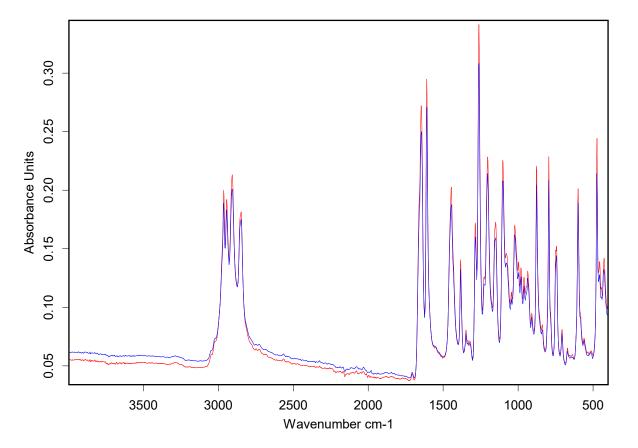
Origin Nutraceutical **Customer:** 

Analysis	Method	MDL Specification	Result	Units
CoEnzyme Q10	HPLC	0.176 Report	97.763	%

7/24/2023

Specifications provided by the Customer. Results with an asterisk across 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)

Search Library 11/23/2021 1:44:44 PM



Product Number	-ON 10625 DRM CoQ10 100% (23748) Standa
Entry No.	1979
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
	970	-ON 10625 DRM CoQ10 100% (23748) Standard 2			

Color	File	Path	Spectrum Type
	42048-10625 DRM CoQ10 100% (39688).0	C:\Users\Israel\Documents\Bruker\OPUS_7.5.18\Data\MEAS	Query Spectrum

6439 Alondra Blvd, Paramount, CA 90723, USA Tel (562) 633 8985, Fax (562) 633 8986

Website: nutrilandgroup.com

Email: nutrilandgroup@outlook.com



# Certificate of Analysis

Product: Botanical Name: Batch: Manufacturing Date	e:	Milk Thistle Seed 80% Silybum Marianum MTE22051580 May 2022		Retesting D	ate:	May 2025
Country of Origin: CAS:		China 22888-70-6				
Content Appearance: Particle Size: Part Used: Identification:		Specification Yellow brown powder 80 mesh Seed Positive		Results Conforms Conforms Conforms		Methods Visual 80 mesh screen TLC UV
Silymarin: Ratio: Loss on Drying: Sulfate Ash: Solubility:		>80% 70:1 <5% <5% Insoluble in water		2.60% 0.38% Conforms		2g/105°C, 5hrs 2g/525°C, 5hrs
Carrier Used: Solvent Used: Heavy Metals: Arsenic:		None Grain alcohol, water <10 ppm <1 ppm		Conforms Conforms Conforms Conforms		Colorimetry AA
Cadmium: Lead: Mercury: Total Plate Count:		<1 ppm <1 ppm <0.5 ppm <10,000 cft/g		Conforms Conforms 100 cfu/g		AA AA AOAC
Mold & Yeast: Coliforms: E. Coli: Salmonella: Staphylococcus Au	ıreus:	<1,000 cfu/g <10 cfu/g Negative Negative Negative		25 cfu/g Negative Conforms Conforms		AOAC AOAC AOAC AOAC
GMO Statement: Standard: Treatment:		Non-GMO Organic Food grade High temperature & pro	essure			
Nutritional Calories: Carbohydrate: Fat: Protein:	Informati 0 0 0 0	on (per 100g) Calcium: Potassium: Sodium: Other Minerals:	0 0 0		Vitamin A: Vitamin Bs: Vitamin C: Other Vitami	0 0 0 ns: 0

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Digitally Signed By QC Director:



## **Sample Information**

CTLA ID: 76172

Date Received: 6/8/2023

Sample Name: 10134 Milk Thistle Extract 80% (Silymarin)

Lot Number: 46870

Customer: Origin Nutraceutical

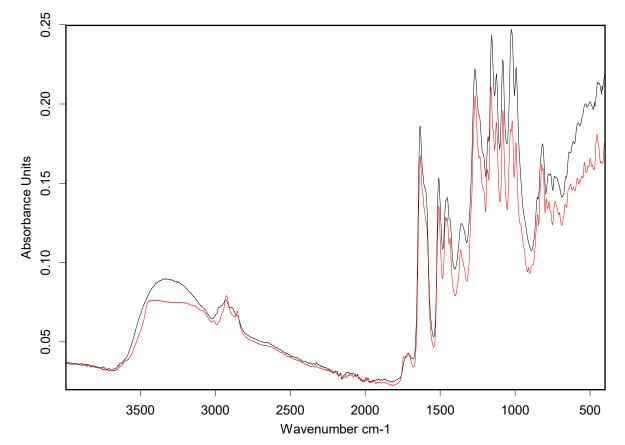
Analysis	Method	MDL Specification	Result	Units
ID	FTIR	Report	93.2	%
FTIR Spectra	FTIR	Report	Attached	
Silymarin (Milk Thistle)	HPLC	0.002 Report	81.7	%
HPTLC	HPTLC	Report	Characteristic	

HPTLC: Fingerprint of test solution is consistent with reference standard Silibum marianum (milk thistle extract).

7/11/2023

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)

Search Library 6/12/2023 3:06:49 PM



Product Number	10134 DRM Milk Thistle Extact 80% 11466 Sta
Entry No.	1357
Library name	ORIGIN STANDARDS LIBRARY.S01
Library description	Origin Nutraceutical
Copyright	Origin Nutraceutical Materials Only

C	olor	Hit Quality	Compound name	CAS Number	Molecular formula	Molecular weight
		932	10134 DRM Milk Thistle Extact 80% 11466 Standard 2			

Color	File	Path	Spectrum Type
	76172-ON 10134 DRM Milk Thistle (46870).1	C:\Users\CTLA Admin\Documents\Bruker\OPUS_7.5.18\Data\MEAS	Query Spectrum