

# **Certificate of Analysis**

**Product:** P243 PHB Tincture 300 mg CBD Full Spectrum - LA Compliant

**Batch Number:** 11943 **Best-By Date:** 02/28/2022

Characteristic	Instrument	Specification	Result	Pass/ Fail/ N/A
Identity				•
Color & Appearance	Visual	Golden tinted oily liquid	Complies	Pass
Odor	Organoleptic	Characteristic of standard	Complies	Pass
Taste	Organoleptic	Neutral to bitter	Complies	Pass
Composition				
Density	<b>Density Meter</b>	0.908 - 0.955 g/mL	Complies	Pass
Fill Volume	In-Process Verification	30.0 - 31.5 mL/bottle	Complies	Pass
Strength - Cannabinoids				
Total CBD¹	HPLC	300.0 - 408.0 mg/bottle	353.0 mg/bottle <sup>4</sup>	Pass
Total THC <sup>1</sup>	HPLC	≤ 0.30%; Detected	0.05%4	Pass
CBDa	HPLC	Report Result	Not Detected <sup>4</sup>	N/A
CBG	HPLC	Report Result	Not Detected <sup>4</sup>	N/A
CBD	HPLC	Report Result	1.31%4	N/A
CBN	HPLC	Report Result	Not Detected <sup>4</sup>	N/A
THC	HPLC	Report Result	0.05%4	N/A
CBC	HPLC	Report Result	0.005%4	N/A
THCa	HPLC	Report Result	Not Detected <sup>4</sup>	N/A
Contaminants - Residual S	olvents			
Acetone	GC-FID	< 1,000 ppm	Complies <sup>4</sup>	Pass
Butanes	GC-FID	< 1,000 ppm	Complies <sup>4</sup>	Pass
Ethanol	GC-FID	< 1,000 ppm	Complies <sup>4</sup>	Pass
Heptanes	GC-FID	< 1,000 ppm	Complies <sup>4</sup>	Pass
Isopropyl Alcohol	GC-FID	< 1,000 ppm	Complies <sup>4</sup>	Pass
Propane	GC-FID	< 1,000 ppm	Complies <sup>4</sup>	Pass
Benzene	GC-FID	< 2 ppm	Complies <sup>4</sup>	Pass
Toluene	GC-FID	< 180 ppm	Complies <sup>4</sup>	Pass
Pentane	GC-FID	< 1,000 ppm	Complies <sup>4</sup>	Pass
Hexane	GC-FID	< 60 ppm	Complies <sup>4</sup>	Pass
Total Xylenes (m,p,o-xylenes)	GC-FID	< 430 ppm	Complies <sup>4</sup>	Pass
Methanol	GC-FID	< 600 ppm	Complies <sup>4</sup>	Pass
Ethyl Acetate	GC-FID	< 1,000 ppm	Complies <sup>4</sup>	Pass



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Characteristic	Instrument	Specification	Result	Pass/ Fail/ N/A
Contaminants - Pesticides				
Abamectin (avermectins: B1a & B1b)	GC-MS / LC-MS	< 0.07 ppm	Complies <sup>4</sup>	Pass
Azoxystrobin	GC-MS / LC-MS	< 0.02 ppm	Complies <sup>4</sup>	Pass
Bifenazate	GC-MS / LC-MS	< 0.02 ppm	Complies <sup>4</sup>	Pass
Etoxazole	GC-MS / LC-MS	< 0.01 ppm	Complies⁴	Pass
Imazalil	GC-MS / LC-MS	< 0.04 ppm	Complies <sup>4</sup>	Pass
Imidacloprid	GC-MS / LC-MS	< 0.02 ppm	Complies <sup>4</sup>	Pass
Malathion	GC-MS / LC-MS	< 0.05 ppm	Complies <sup>4</sup>	Pass
Myclobutanil	GC-MS / LC-MS	< 0.04 ppm	Complies <sup>4</sup>	Pass
Permethrin (mix of isomers)	GC-MS / LC-MS	< 0.04 ppm	Complies <sup>4</sup>	Pass
Spinosad (mixture of A and D)	GC-MS / LC-MS	< 0.06 ppm	Complies <sup>4</sup>	Pass
Spiromesifen	GC-MS / LC-MS	< 0.03 ppm	Complies <sup>4</sup>	Pass
Spirotetramat	GC-MS / LC-MS	< 0.02 ppm	Complies <sup>4</sup>	Pass
Tebuconazole	GC-MS / LC-MS	< 0.01 ppm	. Complies <sup>4</sup>	Pass
Contaminants - Heavy Met	als			
Arsenic	ICP-MS USP <730>	< 1.36 μg/mL	Complies <sup>4</sup>	Pass
Cadmium	ICP-MS USP <730>	< 0.45 μg/mL	Complies <sup>4</sup>	Pass
Lead	ICP-MS USP <730>	< 0.50 μg/mL	Complies <sup>4</sup>	Pass
Mercury	ICP-MS USP <730>	< 0.30 μg/mL	Complies <sup>4</sup>	Pass
Microbial Purity				
Total Plate Count	USP <2021>	< 10,000 CFU/g	Complies <sup>4</sup>	Pass
Yeast & Mold	USP <2021>	≤ 1,000 CFU/g	Complies <sup>4</sup>	Pass
E. coli	FDA BAM	< 3 MPN/g	Complies <sup>4</sup>	Pass
Shiga-Toxin Producing Escherichia coli (STEC)	qPCR	< 1 CFU/g	S.L. <sup>2</sup>	N/A
Salmonella spp.	USP <2022>	Absent/10 g	Complies <sup>4</sup>	Pass

<sup>&</sup>lt;sup>1</sup> All cannabinoids in their acid forms (ending in "a") are convertible to their non-acid forms via a decarboxylation process (heating). The THC and CBD maximum values reported are the maximum theoretical amounts of THC and CBD the tested product would have if it were fully decarboxylated.

Reviewed By:

Approved By:

Date: 04.21.20

Date: 04.21.20

<sup>&</sup>lt;sup>2</sup> S.L. means "Skip Lot". Parameters are being monitored through product qualification testing and are currently in skip lot protocol.

<sup>&</sup>lt;sup>3</sup> Cannabinoid detected below Limit of Quantitation (LOQ).

<sup>&</sup>lt;sup>4</sup> Result was acquired by 3<sup>rd</sup> party laboratory.



879 Federal Blvd Denver, CO 80204 (303) 427-2379

License Number: 405-00008

405R-00011

#### INFUSED II LABORATORY REPORT

Customer Name:

Greenhouse Growing Systems LLC

Customer License:

403H-65086

Batch Number:

R&D

METRC Tag:

1A400071267EC1E000000476

Instrument Name:

HPLC 1100-2

Product Name: Tincture Formulation

Product Type: Liquid Edible

Sample ID:

321185

Date Received: 01/23/2020

Test Date:

01/25/2020

Report Date:

01/27/2020

ACIDIC COMPOUN	ND mg\unit	NEUTRA COMPO	\L UND mg\unit	Convers	sion Ratio <sup>1</sup>
CBDVA	ND*	CBDV	7.81	CBDV	100%
THCVA	ND*	THCV	ND*	THCV	NR*
CBDA	ND*	CBD	353.01	CBD	100%
THCA	ND*	THC	13.59	THC	100%
CBCA	ND*	CBC	1.24	СВС	100%
CBGA	ND*	CBG	ND*	CBG	NR*
CBNA	ND*	CBN	ND*	CBN	NR*

Unit mass = 27.0 g

Notes:

n = 1, stdev = 0, %RSD = 0% Sample Passes Homogeneity

Stephen Goldman Laboratory Director

<sup>\*</sup> None Reported (NR) because the compound exists at or below the limit of quantitation but above the limit of detection.

<sup>\*</sup> None Detected (ND) because the compound exists at or below the limit of detection.

<sup>\*</sup> Potency (SOP 020)

<sup>\*</sup> Sample Condition deemed acceptable upon receipt by PhytaTech. Sampling done by outside

<sup>\*</sup> Units of % are (mass/mass) and reflect numbers as a fraction of 100.

<sup>1</sup> Conversion ratio indicates the amount of neutral cannabinoid compared directly to its acidic counterpart. A number close to 1 means a high neutral content. A number close to 0 indicates a high acidic cannabinoid content.



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## **PESTICIDES LABORATORY REPORT**

**Customer Name:** 

Greenhouse Growing Systems LLC

Customer License:

403H-65086

Batch Number:

R&D

METRC Tag:

1A400071267EC1E000000476

**HPLC 1050** Instrument Name:

Sample ID: 321185

Product Name: Tincture Formulation

Date Received: 01/23/2020

01/27/2020

Liquid Edible

Test Date: Report Date:

Product Type:

01/27/2020

PESTICIDE	ppb
Abamectin	ND*
Avermectin B1b	ND*
Azoxystrobin	ND*
Bifenazate	ND*
■ Etoxazole	ND*
Imazalil	ND*
Imidacloprid	ND*
Malathion A	ND*
Myclobutanil	ND*
Cis Permethrin	ND*
Trans Permethrin	ND*
Spinosyn A	ND*
Spinosyn D	ND*
Spiromesifen	ND*
Spirotetramat	ND*
Tebuconazole	ND*

#### Notes:

Stephen Goldman Laboratory Director

<sup>\*</sup> None Reported (NR) because the compound exists at or below the detection limit of the method.

<sup>\*</sup> None Detected (ND) because the compound was not detected.



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License Number: 405-00008

405R-00011

## **RESIDUAL SOLVENTS LABORATORY REPORT**

**Customer Name:** 

Greenhouse Growing Systems LLC

Customer License:

403H-65086

Batch Number:

R&D

METRC Tag:

1A400071267EC1E000000476

Instrument Name:

GC 5890

Product Name: Tincture Formulation

Product Type:

Liquid Edible

Sample ID:

321185

Test Date:

Date Received: 01/23/2020 01/24/2020

Report Date:

01/27/2020

# **RESIDUAL SOLVENTS**

parts per million (ppm)	
Acetone	ND*
Benzene	ND*
Butane	ND*
Ethanol	NR*
<b>H</b> eptane	ND*
<b>Hexane</b>	ND*
<b>I</b> sobutane	ND*
Isopropyl Alcohol	ND*
Pentane Pentane	ND*
Propane	ND*
Toluene	ND*
Xylene	ND*

#### Notes:

Stephen Goldman Laboratory Director

<sup>\*</sup> None Reported (NR) because the compound exists at or below the limit of quantitation but above the limit of detection.

<sup>\*</sup> None Detected (ND) because the compound exists at or below the limit of detection.

<sup>\*</sup> Residual Solvents (SOP 032)

<sup>\*</sup> Sample Condition deemed acceptable upon receipt by PhytaTech. Sampling done by outside party.



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

Email: utlab@advancedlabsinc.com FDA Registration #14353128308

# Test Certificate

Description:

Sample ID:

11943

Lot No:

Location:

Received: Completed: 1/22/2020

300 mg FS HSO Tincture

1/29/2020

Client: Advanced Extraction

5455 Spine Road #E

Boulder, CO 80301

Lab No: 186987-01

Analysis	Result	Per Unit	Specifications	Method
Mercury	< 0.001	ppm	Report	ICP-MS USP <730>
Lead	0.002	ppm	Report	ICP-MS USP <730>
Arsenic	0.033	ppm	Report	ICP-MS USP <730>
Cadmium	< 0.001	ppm	Report	ICP-MS USP <730>

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

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

Results Approved By:

lisa Farnsworth-Quality Technician

Dated:

1/29/2020

Printed: 1/29/2020 2:47:58 PM



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

Email: utlab@advancedlabsinc.com FDA Registration #14353128308

# Test Certificate

Description:

300 mg FS HSO Tincture

Sample ID:

11943

Lot No:

Location:

Received: Completed: 1/22/2020 1/28/2020 Client: Advanced Extraction

5455 Spine Road #E Boulder, CO 80301

Lab No: 186986-01

Analysis	Result	Per Unit	Specifications	Method
Total Aerobic Microbial Count	<10	CFU/g	Report	USP <2021>
E. Coli Count	<3	MPN/g	Report	FDA BAM
Salmonella	Absent	per 10 grams	Report	USP <2022>
Total Yeast & Mold	<10	CFU/g	Report	USP <2021>
Yeast *	<10	CFU/g	Report	
Mold *	<10	CFU/g	Report	

FDA BAM Method Utilized: 10g sample size

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Results Approved By:

Alisa Farnsworth-Quality Technician

Dated:

1/28/2020

Printed: 1/28/2020 4:14:59 PM



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