

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Organic Full Spectrum CBD Tincture - Tropical
PRODUCT STRENGTH: 900mg
TINCTURE BATCH: 240814A
BEST BY DATE: 8/14/26
HEMP EXTRACT LOT: EV24.OFXD.219

Physical Attributes

Test	Method	Specification	Results
Color	Joy Internal	Golden to Amber	PASS
Odor	Joy Internal	Characteristic - Coconut and Hemp, Tropical	PASS
Appearance	Joy Internal	Golden to Amber oil in brown glass bottle with dropper.	PASS
Primary Package Eval.	Joy Internal	Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval.	Joy Internal	Labeling Compliance Checked, Cartons sturdy and clean. Sufficient cushion material exists. Box taped and secure.	PASS

Review of Third-Party Analysis

Panel	Method	Specification	Results*	Pass/Fail
Potency - Total CBD	HPLC-UV DAD	LOQ*: ≥ 900 mg / bottle	1057mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: $<0.3\%$ total THC, mg per bottle (Full Spectrum)	0.18% 53mg	PASS
Expanded Pesticide Panel	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	Below LOQ	PASS
Microbial Escherichia coli (STEC)	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram**	Absent	PASS
Microbial Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	Absent	PASS
Microbial Yeast and Mold	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10^2 CFU/gram	Below LOQ	PASS
Microbial Total Coliforms	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10^2 CFU/gram	Below LOQ	PASS
Microbial Total Aerobic Count	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10^3 CFU/gram	Below LOQ	PASS
Heavy Metals	ICP-MS	Arsenic (As): ≤ 1.5 ppm† Cadmium (Cd): ≤ 0.5 ppm Lead (Pb): ≤ 0.5 ppm Mercury (Hg): ≤ 1.5 ppm	Below LOQ	PASS
Mycotoxins	ICP-MS	Total Aflatoxins <20 ppb†† Aflatoxin B1 < 5 ppb Ochratoxin < 5 ppb	Below LOQ	PASS
Residual Solvents	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	Below LOQ	PASS

*Level of Quantification

**Colony Forming Units per Gram

† Parts Per Million †† Part Per Billion

Values expressed in scientific notation.

Examples:

$10^2=100$

$10^3=1,000$

Quality Certified

Name

8/30/24

Date



Certificate of Analysis

Compliance Test

Batch # 240814A
Batch Date: 2024-07-25
Extracted From: N/A

Test Reg State: Colorado

Order Date: 2024-07-25
Sample # AAFU362

Sampling Date: 2024-07-29
Lab Batch Date: 2024-07-29
Completion Date: 2024-08-01

Initial Gross Weight: 227.300 g



Potency
Tested



Pathogenic
Passed



Microbiology Petrifilm
Passed

Product Image



Potency 10

Specimen Weight: 101.320 mg

Tested

SOP13.001 (LCUV)

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
CBD	10.000	5.40E-5	0.015	35.060	3.506
Delta-9 THC	10.000	1.30E-5	0.015	1.800	0.180
CBC	10.000	1.80E-5	0.015	1.080	0.108
CBG	10.000	2.48E-4	0.015	0.670	0.067
CBDV	10.000	6.50E-5	0.015	0.340	0.034
CBDA	10.000	1.00E-5	0.015	<LOQ	<LOQ
CBGA	10.000	8.00E-5	0.015	<LOQ	<LOQ
CBN	10.000	1.40E-5	0.015	<LOQ	<LOQ
THCA-A	10.000	3.20E-5	0.015	<LOQ	<LOQ
THCV	10.000	7.00E-6	0.015	<LOQ	<LOQ
Total Active CBD	10.000			35.060	3.506
Total Active THC	10.000			1.800	0.180



Potency Summary

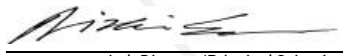
Total Active THC
0.180%

Total Active CBD
3.506%

Total CBG
0.067%

Total CBN
None Detected

Total Cannabinoids
3.895%


Aixa Sun Lab Director/Principal Scientist
D.H.Sc., M.Sc., B.Sc., MT (AAB)



Definitions and Abbreviations used in this report: Total Active CBD = CBD + (CBD-A * 0.877), *Total CBDV = CBDV + (CBDVA * 0.867), Total Active THC = THCA-A * 0.877 + Delta 9 THC, Total THCV = THCV + (THCVA * 0.87), CBG Total = (CBGA * 0.878) + CBG, CBN Total = (CBNA * 0.876) + CBN, Total CBC = CBC + (CBCA * 0.877), Total THC-O-Acetate = Delta 8 THC-O-Acetate + Delta 9 THC-O-Acetate, Total THCP = Delta8-THCP + Delta9-THCP, Total Cannabinoids = Total percentage of cannabinoids within the sample. (mg/ml) = Milligrams per Milliliter, LOQ = Limit of Quantitation, LOD = Limit of Detection, Dilution = Dilution Factor, (ppb) = Parts per Billion, (%) = Percent, (cfu/g) = Colony Forming Unit per Gram, (µg/g) = Microgram per Gram, (ppm) = Parts per Million, (ppm) = (µg/g), (aw) = Water Activity, (mg/Kg) = Milligram per Kilogram. ACS uses simple acceptance criteria. Passed - Analyte/microbe is not detected or is at the level below the action limit per CO rule 6 CCR 1010-21. Failed - Analyte/microbe is at the level that equal or above the action limit per CO rule 6 CCR 1010-21 Sample not received via laboratory sampling.

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Certificate of Analysis
Compliance TestBatch Batch# 240814A
Date:
2024-02-14 2024-02-14
Completion Date:
2024-02-23

Test Reg State: Colorado

Initial Gross Weight: 15.224 g

 Pesticides
Passed

Product Image

 Pesticides - CO
Specimen Weight: 582.500 mgPassed
SOP14.003 (LCMS/GCMS)

Dilution Factor: 2.580

Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)
Abamectin	3.1800E-4	100	100	<LOQ	Dodemorph	6.4700E-12	50	50	<LOQ	Naled	5.8500E-6	100	100	<LOQ
Acephate	3.9632E-2	20	20	<LOQ	Endosulfan sulfate	8.8376E-1	2500	2500	<LOQ	Novaluron	2.0500E-4	25	25	<LOQ
Acequinocyl	5.7646E-2	30	30	<LOQ	Endosulfan-alpha	1.2220E+1	2500	2500	<LOQ	Oxamyl	1.6190E-3	1500	1500	<LOQ
Acetamiprid	3.3800E-10	50	50	<LOQ	Endosulfan-beta	2.2760E+1	2500	2500	<LOQ	Paclobutrazol	6.9300E-8	10	10	<LOQ
Aldicarb	2.2744E-2	1000	1000	<LOQ	Ethoprophos	1.5900E-5	10	10	<LOQ	Pentachloronitrobenzen (Quintozene)	4.3900E+0	20	20	<LOQ
Allethrin	4.7244E-1	200	200	<LOQ	Etofenprox	8.3050E-3	50	50	<LOQ	Permethrin	2.2089E-2	50	50	<LOQ
Atrazine	3.7992E-1	25	25	<LOQ	Etoxazole	8.3558E-1	20	20	<LOQ	Phenothrin	2.1200E-7	50	50	<LOQ
Azadirachtin	3.0710E-3	1000	1000	<LOQ	Etridiazole	4.0200E+0	150	150	<LOQ	Phosmet	9.6150E-3	20	20	<LOQ
Azoxystrobin	1.3247E-2	20	20	<LOQ	Fenhexamid	1.0947E+0	125	125	<LOQ	Piperonylbutoxide	1.3400E-7	1250	1250	<LOQ
Benzovindiflupyr	1.2567E-2	20	20	<LOQ	Fenoxycarb	3.4507E-1	10	10	<LOQ	Pirimicarb	5.6600E-5	10	10	<LOQ
Bifenazate	2.1700E-8	20	20	<LOQ	Fenpyroximate	4.4800E-7	20	20	<LOQ	Prallethrin	1.6732E-1	50	50	<LOQ
Bifenthrin	8.4200E-4	1000	1000	<LOQ	Fensulfothion	7.9400E-4	10	10	<LOQ	Propiconazole	2.1300E-14	100	100	<LOQ
Boscalid	4.3300E-6	10	10	<LOQ	Fenthion	4.9113E+0	10	10	<LOQ	Propoxur	3.5081E-1	10	10	<LOQ
Buprofezin	1.6600E-9	20	20	<LOQ	Fenvalerate	5.9775E-1	100	100	<LOQ	Pyraclostrobin	5.3100E-7	10	10	<LOQ
Carbaryl	1.3800E-5	25	25	<LOQ	Fipronil	2.8847E-2	10	10	<LOQ	Pyrethrins	6.2350E-3	50	50	<LOQ
Carbofuran	7.7600E-5	10	10	<LOQ	Flonicamid	6.9733E-2	25	25	<LOQ	Pyridaben	8.7500E-15	20	20	<LOQ
Chlorantraniliprole	1.3559E-1	20	20	<LOQ	Fludioxonil	1.3402E-2	10	10	<LOQ	Pyriproxyfen	9.5800E-5	10	10	<LOQ
Chlorfenapyr	1.5370E+1	1500	1500	<LOQ	Fluopyram	1.1200E-9	10	10	<LOQ	Resmethrin	6.8013E-2	50	50	<LOQ
Chlorpyrifos	9.0900E-5	500	500	<LOQ	Hexythiazox	6.1900E-5	10	10	<LOQ	Spinetoram	2.3645E-2	10	10	<LOQ
Clofentezine	3.7100E-7	10	10	<LOQ	Imazalil	2.9500E-4	10	10	<LOQ	Spinosaad	5.9903E-1	10	10	<LOQ
Clothianidin	3.9900E-4	25	25	<LOQ	Imidacloprid	1.5300E-4	10	10	<LOQ	Spirodiclofen	3.7377E+6	250	250	<LOQ
Coumaphos	9.8600E-5	10	10	<LOQ	Iprodione	1.0554E-1	500	500	<LOQ	Spiromesifen	3.2183E-1	3000	3000	<LOQ
Cyantraniliprole	6.0040E-3	10	10	<LOQ	Kinoprene	3.4000E+0	500	1250	<LOQ	Spirotetramat	4.2760E-2	10	10	<LOQ
Cyfluthrin	2.8130E+1	200	200	<LOQ	Kresoxim Methyl	1.4500E-4	150	150	<LOQ	Spiroxamine	1.2172E+0	100	100	<LOQ
Cypermethrin	1.1900E-6	300	300	<LOQ	Lambda Cyhalothrin	1.1686E-1	250	250	<LOQ	Tebuconazole	1.4800E-14	10	10	<LOQ
Cyprodinil	1.1410E-3	10	10	<LOQ	Malathion	1.3300E-4	10	10	<LOQ	Tebufenozide	1.8121E-2	10	10	<LOQ
Daminozide	3.0408E-1	100	100	<LOQ	Metaxyl	4.8600E-5	10	10	<LOQ	Teflubenzuron	1.6620E-2	25	25	<LOQ
Deltamethrin	4.9284E-1	500	500	<LOQ	Methiocarb	2.2810E-3	10	10	<LOQ	Tetrachlorvinphos	8.3913E-1	10	10	<LOQ
Diazinon	3.9100E-10	20	20	<LOQ	Methomyl	1.1500E-6	25	25	<LOQ	Tetramethrin	9.9200E-5	100	100	<LOQ
Dichlorvos	1.1406E+0	50	50	<LOQ	Methoprene	1.1485E+0	2000	2000	<LOQ	Thiabendazole	1.2510E-3	20	20	<LOQ
Dimethoate	2.8400E-6	10	10	<LOQ	methyl-Parathion	4.2400E+0	9.6	9.6	<LOQ	Thiacloprid	1.1200E-5	10	10	<LOQ
Dimethomorph	1.5700E-4	50	50	<LOQ	Mevinphos	4.4200E-5	25	25	<LOQ	Thiamethoxam	2.2500E-6	10	10	<LOQ
Dinotefuran	2.3697E-1	50	50	<LOQ	MGK-264	2.5880E-3	50	50	<LOQ	Thiophanate-methyl	2.2300E-4	50	50	<LOQ
Diuron	6.8620E-3	125	125	<LOQ	Myclobutanil	7.0006E-1	10	10	<LOQ	Trifloxystrobin	2.1700E-13	10	10	<LOQ

Aixa Sun Lab Director/Principal Scientist
D.H.Sc., M.Sc., B.Sc., MT (AAB)

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Organic Full Spectrum CBD Tincture - Tropical 900mg

Batch ID or Lot Number: 240814A	Test: Metals	Reported: 2/13/24
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Matrix: Concentrate	Test ID: T000270433	Started: 2/13/24	USDA License: N/A
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Status: Active	Method: TM19 (ICP-MS): Heavy Metals	Received: 02/08/2024 @ 10:42 AM	Sampler ID: N/A
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HEAVY METALS DETERMINATION

Compound	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.045 - 4.45	ND	
Cadmium	0.045 - 4.46	ND	
Mercury	0.047 - 4.68	ND	
Lead	0.046 - 4.62	ND	

	Karen Winterheimer 13-Feb-24 2:40 PM
--	--

PREPARED BY / DATE

	Karen Winterheimer 13-Feb-24 3:19 PM
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APPROVED BY / DATE

Definitions

ND = None Detected (Defined by Dynamic Range of the method)

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC.



Certificate #4329.02

Organic Full Spectrum CBD Tincture - Tropical 900mg

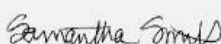
Batch ID or Lot Number: 240814A	Test: Mycotoxins	Reported: 2/18/24	
Matrix: Concentrate	Test ID: T000270435	Started: 2/15/24	USDA License: N/A
Status: Active	Method: TM18 (UHPLC-QQQ LCMS/MS): Mycotoxins	Received: 02/08/2024 @ 10:42 AM	Sampler ID: N/A

MYCOTOXIN DETERMINATION

Compound	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	2.4 - 133.5	ND	N/A
Aflatoxin B1	1 - 34.3	ND	
Aflatoxin B2	1 - 34.1	ND	
Aflatoxin G1	1 - 34.4	ND	
Aflatoxin G2	1 - 34.6	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	


Karen Winternheimer
18-Feb-24
10:21 AM

PREPARED BY / DATE


Sam Smith
18-Feb-24
10:23 AM

APPROVED BY / DATE

Definitions

ND = None Detected (Defined by Dynamic Range of the method)

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Certificate #4329.02

Organic Full Spectrum CBD Tincture - Tropical 900mg

Batch ID or Lot Number: 240814A	Test: Residual Solvents	Reported: 2/12/24	
Matrix: N/A	Test ID: T000270434	Started: 2/9/24	USDA License: N/A
Status: Active	Methods: TM04 (GC-MS): Residual Solvents	Received: 02/08/2024 @ 10:42 AM	Sampler ID: N/A

RESIDUAL SOLVENTS DETERMINATION

Solvent	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	98 - 1960	*ND	
Butanes (Isobutane, n-Butane)	180 - 3591	*ND	
Methanol	66 - 1314	*ND	
Pentane	95 - 1907	*ND	
Ethanol	93 - 1861	*ND	
Acetone	107 - 2143	*ND	
Isopropyl Alcohol	102 - 2037	*ND	
Hexane	7 - 130	*ND	
Ethyl Acetate	105 - 2100	*ND	
Benzene	0.2 - 4.3	*ND	
Heptanes	104 - 2075	*ND	
Toluene	19 - 382	*ND	
Xylenes (m,p,o-Xylenes)	133 - 2669	*ND	


 Sam Smith
 12-Feb-24
 12:46 PM


 Karen Winternheimer
 12-Feb-24
 12:49 PM

PREPARED BY / DATE

APPROVED BY / DATE

Definitions

* ND = None Detected (Defined by Dynamic Range of the method)

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Certificate #4329.02



Certificate of Analysis

Compliance Test

Batch # 240814A Test Reg State: Colorado
Batch Date: 2024-08-14
Extracted From: N/A

Order Date: 2024-08-14 Sampling Date: 2024-08-19 Initial Gross Weight: 235.600 g
Sample # AAFV954 Lab Batch Date: 2024-08-19
Completion Date: 2024-08-23



Product Image



Pathogenic
Passed



Microbiology Petrifilm
Passed

Pathogenic SE (qPCR) - CO

Specimen Weight: 25.850 g

Dilution Factor: 1.000

Analyte	Result (cfu/g)	Analyte	Result (cfu/g)
E.Coli	Passed	Salmonella	Passed

Passed
SOP13.029
(qPCR)



Microbiology (Petrifilm) - CO

Specimen Weight: 1006.800 mg

Dilution Factor: 1.000

Analyte	LOQ (cfu/g)	Action Limit (cfu/g)	Result (cfu/g)	Analyte	LOQ (cfu/g)	Action Limit (cfu/g)	Result (cfu/g)
Aerobic Bacteria	10	10000	<10	Yeast/Mold	10	1000	<10
Total Coliform	10	100	<10				

Passed
SOP13.003
(Petrifilm)


Aixia Sun Lab Director/Principal Scientist
D.H.Sc., M.Sc., B.Sc., MT (AAB)



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