

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Organic CBD Tincture - Mint
PRODUCT STRENGTH: 1350mg
TINCTURE BATCH: 250307A
BEST BY DATE: 3/7/2027
HEMP EXTRACT LOT: 250218A, 250304A, O-1206-0129-FT-BSD

Physical Attributes

Test	Method	Specification	Results
Color	Joy Internal	Golden to Amber	PASS
Odor	Joy Internal	Characteristic - Olive and Hemp, Minty	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*: $\geq$ product strength mg / bottle	1607mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: $<0.01\%$ (broad spectrum)	Below LOQ	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

3/20/2025

Date



Cannabinoid Analysis

Tested by high-performance liquid chromatography with diode-array detection (HPLC-DAD).

Method: QSP 1157 - Analysis of Cannabinoids by HPLC-DAD

TOTAL THC: <1.0 mg/bottle

Total THC (Δ^9 -THC+0.877*THCa)

TOTAL CBD: 1607 mg/bottle

Total CBD (CBD+0.877*CBDA)

TOTAL CANNABINOIDS: 1719.210 mg/unit

Total Cannabinoids (Total THC) + (Total CBD) + (Total CBG) + (Total THCV) + (Total CBC) + (Total CBDV) + Δ^8 -THC + CBL + CBN

TOTAL CBG: 105.240 mg/unit

Total CBG (CBG+0.877*CBGa)

TOTAL THCV: ND

Total THCV (THCV+0.877*THCVa)

TOTAL CBC: 0.390 mg/unit

Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: 4.560 mg/unit

Total CBDV (CBDV+0.877*CBDVa)

CANNABINOID TEST RESULTS - 02/21/2025

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBD	0.004 / 0.011	± 1.9992	53.598	5.3598
CBG	0.002 / 0.006	± 0.1701	3.508	0.3508
CBDV	0.002 / 0.012	± 0.0062	0.152	0.0152
Δ^9 -THC	0.002 / 0.014	± 0.0020	0.036	0.0036
CBC	0.003 / 0.010	± 0.0004	0.013	0.0013
Δ^8 -THC	0.01 / 0.02	N/A	ND	ND
THCa	0.001 / 0.005	N/A	ND	ND
THCV	0.002 / 0.012	N/A	ND	ND
THCVa	0.002 / 0.019	N/A	ND	ND
CBDA	0.001 / 0.026	N/A	ND	ND
CBDVa	0.001 / 0.018	N/A	ND	ND
CBGa	0.002 / 0.007	N/A	ND	ND
CBL	0.003 / 0.010	N/A	ND	ND
CBN	0.001 / 0.007	N/A	ND	ND
CBCa	0.001 / 0.015	N/A	ND	ND
SUM OF CANNABINOIDS			57.307 mg/g	5.7307%

Unit Mass: 30 grams per Unit / Serving Size: 1 grams per Serving

Δ^9 -THC per Unit	110 per-package limit	<1mg/bottle	PASS
Δ^9 -THC per Serving		<0.03 mg/serving	PASS
Total THC per Unit		1.080 mg/unit	
Total THC per Serving		0.036 mg/serving	
CBD per Unit		1607.940 mg/unit	
CBD per Serving		53.598 mg/serving	
Total CBD per Unit		1607.940 mg/unit	
Total CBD per Serving		53.598 mg/serving	
Sum of Cannabinoids per Unit		1719.210 mg/unit	
Sum of Cannabinoids per Serving		57.307 mg/serving	
Total Cannabinoids per Unit		1719.210 mg/unit	
Total Cannabinoids per Serving		57.307 mg/serving	

DENSITY TEST RESULT

0.9364 g/mL

Tested 02/21/2025

Method: QSP 7870 - Sample Preparation

Organic Tincture- 1350mg - Mint

Batch ID or Lot Number: 250307A	Test, Test ID and Methods: Various	Matrix: Concentrate
Reported: 03Feb2025	Started: 31Jan2025	Received: 30Jan2025

**Residual Solvents -
Colorado Compliance**

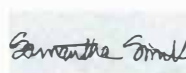
Test ID: T000297931

Methods: TM04 (GC-MS): Residual

Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	83 - 1670	ND	
Butanes (Isobutane, n-Butane)	165 - 3308	ND	
Methanol	52 - 1035	ND	
Pentane	86 - 1710	ND	
Ethanol	90 - 1806	ND	
Acetone	91 - 1817	ND	
Isopropyl Alcohol	95 - 1900	ND	
Hexane	6 - 110	ND	
Ethyl Acetate	94 - 1872	ND	
Benzene	0.2 - 3.6	ND	
Heptanes	89 - 1782	ND	
Toluene	17 - 331	ND	
Xylenes (m,p,o-Xylenes)	122 - 2430	ND	

Final Approval


 Judith Marquez
 06Feb2025
 07:50:00 AM MST
 PREPARED BY / DATE


 Sam Smith
 06Feb2025
 07:56:00 AM MST
 APPROVED BY / DATE

Organic Tincture- 1350mg - Mint

BatchID or Lot Number: 250307A ID and Methods:
Various

Matrix:
Concentrate

Reported:
03Feb2025

Started:
31Jan2025

Received:
30Jan2025

Pesticides

Test ID: T000297928

Methods: TM17

(LC-QQ LC MS/MS)

(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)		Dynamic Range (ppb)	Result (ppb)	
Abamectin	381 - 2759	ND		Malathion	286 - 2743	ND
Acephate	34 - 2749	ND		Metaxyl	38 - 2758	ND
Acetamiprid	42 - 2758	ND		Methiocarb	38 - 2785	ND
Azoxystrobin	42 - 2753	ND		Methomyl	40 - 2813	ND
Bifenazate	39 - 2790	ND		MGK 264 1	180 - 1624	ND
Boscalid	45 - 2734	ND		MGK 264 2	121 - 1060	ND
Carbaryl	39 - 2680	ND		Myclobutanil	38 - 2746	ND
Carbofuran	41 - 2706	ND		Naled	50 - 2647	ND
Chlorantraniliprole	40 - 2746	ND		Oxamyl	39 - 2825	ND
Chlorpyrifos	44 - 2701	ND		Paclobutrazol	44 - 2652	ND
Clofentezine	280 - 2730	ND		Permethrin	274 - 2782	ND
Diazinon	287 - 2743	ND		Phosmet	39 - 2602	ND
Dichlorvos	283 - 2801	ND		Propfos	286 - 2745	ND
Dimethoate	42 - 2774	ND		Propoxur	41 - 2694	ND
E-Fenpyroximate	267 - 2835	ND		Pyridaben	275 - 2837	ND
Etofenprox	43 - 2749	ND		Spinosad A	32 - 2062	ND
Etoxazole	272 - 2718	ND		Spinosad D	64 - 682	ND
Fenoxycarb	41 - 2722	ND		Spiromesifen	255 - 2820	ND
Fipronil	28 - 2719	ND		Spirotetramat	284 - 2765	ND
Flonicamid	44 - 2818	ND		Spiroxamine 1	14 - 1080	ND
Fludioxonil	279 - 2760	ND		Spiroxamine 2	23 - 1623	ND
Hexythiazox	40 - 2862	ND		Tebuconazole	308 - 2714	ND
Imazalil	282 - 2760	ND		Thiacloprid	42 - 2838	ND
Imidacloprid	39 - 2826	ND		Thiamethoxam	41 - 2821	ND
Kresoxim-methyl	40 - 2752	ND		Trifloxystrobin	45 - 2726	ND

Final Approval

Sam Smith
 Sam Smith
 07Feb2025
 10:36:00 AM MST
 PREPARED BY / DATE

K. Winternheimer
 Karen Winternheimer
 07Feb2025
 10:38:00 AM MST
 APPROVED BY / DATE

Organic Tincture- 1350mg - Mint

Batch ID or Lot Number: 250307A	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 3 of 6
Reported: 03Feb2025	Started: 31Jan2025	Received: 30Jan2025	

Mycotoxins - Colorado Compliance

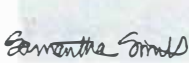
Test ID: T000297932

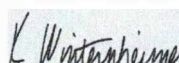
Methods: TM18 (UHPLC-QQQ

LCMS/MS): Mycotoxins

	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	3.63 - 119.61	ND	N/A
Aflatoxin B1	1.02 - 30.28	ND	
Aflatoxin B2	1.04 - 29.76	ND	
Aflatoxin G1	1.04 - 30.28	ND	
Aflatoxin G2	1.07 - 30.68	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

Final Approval

 Sam Smith
06Feb2025
09:14:00 AM MST
PREPARED BY / DATE

 Karen Winternheimer
06Feb2025
09:16:00 AM MST
APPROVED BY / DATE

Heavy Metals - Colorado Compliance

Test ID: T000297930

Methods: TM19 (ICP-MS): Heavy

Metals

	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.04 - 4.25	ND	
Cadmium	0.04 - 4.27	ND	
Mercury	0.05 - 5.31	ND	
Lead	0.04 - 4.44	ND	

Final Approval

 Judith Marquez
04Feb2025
01:35:00 PM MST
PREPARED BY / DATE

 Sam Smith
04Feb2025
01:38:00 PM MST
APPROVED BY / DATE



Microbiology Analysis

PCR AND PLATING

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbiological contaminants.

Method: QSP 1221 - Analysis of Microbiological Contaminants

Analysis conducted by 3M™ Petrifilm™ and plate counts of microbiological contaminants.

Method: QSP 6794 - Plating with 3M™ Petrifilm™

MICROBIOLOGY TEST RESULTS (PCR) - 03/18/2025 PASS

COMPOUND	ACTION LIMIT	RESULT	RESULT
Salmonella spp.	Not Detected in 1g	ND	PASS
Shiga toxin-producing Escherichia coli	Not Detected in 1g	ND	PASS

MICROBIOLOGY TEST RESULTS (PLATING) - 03/18/2025 ND

COMPOUND	RESULT (cfu/g)
Coliforms	ND
Total Aerobic Bacteria	ND
Total Yeast and Mold	ND

NOTES
Sample unit mass provided by client.