

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Organic CBD Tincture - Natural
PRODUCT STRENGTH: 2250mg
TINCTURE BATCH: 221011A
BEST BY DATE: 7/25/2024
HEMP EXTRACT LOT: 220926C

Physical Attributes

Test	Method	Specification	Results
Color	Joy Internal	Golden to Amber	PASS
Odor	Joy Internal	Characteristic - Olive and Hemp	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	*NLT (product strength) mg / bottle	2419mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: 10 ppm (.001-0.3%)	ND	PASS
Expanded Pesticide Panel	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	ND	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 Panel	ICP-MS	Arsenic (As): ≤1.5 ppm Cadmium (Cd): ≤0.5 ppm Lead (Pb): ≤0.5 ppm Mercury (Hg): ≤1.5 ppm	ND	PASS
Mycotoxins	ICP-MS	Total Aflatoxins <20 ppb† Afltoxin B1 < 5 ppb Ochratoxin < 5ppb	ND	PASS
Residual Solvents	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	ND	PASS

*Level of Quantitation, † Parts Per Million ‡ Part Per Billion
 CFU/g=Colony Forming Units per Gram
 *Nothing Less Than
 10²=100 CFU
 10³=1,000 CFU



10/27/2022

Quality Certified

Name

Date

2250 BS 221011A


Batch ID or Lot Number: 220926C	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 1 of 3
Reported: 03Oct2022	Started: 30Sep2022	Received: 29Sep2022	


Cannabinoids - Colorado Compliance

Test ID: T000223007
Methods: TM14 (HPLC-DAD): Potency – Standard

Cannabinoid Analysis	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.007	0.022	ND	ND	
Cannabichromenic Acid (CBCA)	0.006	0.020	ND	ND	
Cannabidiol (CBD)	0.023	0.057	8.768	87.68	
Cannabidiolic Acid (CBDA)	0.023	0.059	ND	ND	
Cannabidivarin (CBDV)	0.005	0.014	0.050	0.50	
Cannabidivarinic Acid (CBDVA)	0.010	0.025	ND	ND	
Cannabigerol (CBG)	0.004	0.012	0.519	5.19	
Cannabigerolic Acid (CBGA)	0.016	0.052	ND	ND	
Cannabinol (CBN)	0.005	0.016	<LOQ	0.07	
Cannabinolic Acid (CBNA)	0.011	0.036	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.020	0.062	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.018	0.056	ND	ND	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.016	0.050	ND	ND	
Tetrahydrocannabivarin (THCV)	0.004	0.011	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.014	0.044	ND	ND	
Total Cannabinoids			9.344	93.44	
Total Potential THC			ND	ND	
Total Potential CBD			8.768	87.68	

Final Approval


Sam Smith
03Oct2022
12:30:00 PM MDT
PREPARED BY / DATE


Karen Winternheimer
03Oct2022
12:32:00 PM MDT
APPROVED BY / DATE


2250mg BS OTNAT2250 Tincture 220926C

Batch ID or Lot Number: 221011A	Test: Microbial Contaminants	Reported: 21Oct2022	USDA License: N/A
Matrix: Finished Product	Test ID: T000224587	Started: 18Oct2022	Sampler ID: N/A
	Method(s): TM25 (qPCR) TM24, TM26, TM27 (Culture Plating): Microbial (Colorado Panel)	Received: 17Oct2022	Status: Active

Microbial Contaminants

Contaminants	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 ² CFU/g	1.0x10 ³ - 1.5x10 ⁵	None Detected	
Total Coliforms*	TM27: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	

Final Approval



Eden Thompson-Wright
21Oct2022
03:19:00 PM MDT

PREPARED BY / DATE



Brianne Maillot
21Oct2022
04:17:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/dd893389-30a5-4c6d-9b11-46110e2e6d95>

Definitions

* Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form. Examples: 10² = 100 CFU, 10³ = 1,000 CFU, 10⁴ = 10,000 CFU, 10⁵ = 100,000 CFU
CFU/g = Colony Forming Units per Gram, LOD = Limit of Detection
ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation
STEC = Shiga Toxin-Producing E. coli

Testing results are based solely upon the sample submitted to SC Laboratories, Inc., in the condition it was received. SC Laboratories, Inc., 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 SC Laboratories, Inc. ISO/IEC 17025:2017 Accredited by A2LA.



Cert #4329.02

CDPHE Certified

dd89338930a54c6d9b1146110e2e6d95.1



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794



Report Number: 22-008914/D003.R000
Report Date: 08/04/2022
ORELAP#: OR100028
Purchase Order:
Received: 07/28/22 10:47

Solvents		Method: Residual Solvents by GC/MS ^b				Units µg/g	Batch 2206521	Analyze 08/03/22 10:30 AM			
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
2-Methylbutane (Isopentane)	< LOQ	1000	200	pass		2-Methylpentane	< LOQ	60.0	30.0	pass	
2-Propanol (IPA)	< LOQ	1000	200	pass		2,2-Dimethylbutane	< LOQ	60.0	30.0	pass	
2,2-Dimethylpropane (neo-pentane)	< LOQ	1000	200	pass		2,3-Dimethylbutane	< LOQ	60.0	30.0	pass	
3-Methylpentane	< LOQ	60.0	30.0	pass		Acetone	< LOQ	1000	200	pass	
Benzene	< LOQ	2.00	1.00	pass		Butanes (sum)	< LOQ	1000	400	pass	
Ethanol	< LOQ	1000	200	pass		Ethyl acetate	< LOQ	1000	200	pass	
Hexanes (sum)	< LOQ	60.0	150	pass		m,p-Xylene	< LOQ	430	200	pass	
Methanol	< LOQ	600	200	pass		Methylpropane (Isobutane)	< LOQ	1000	200	pass	
n-Butane	< LOQ	1000	200	pass		n-Heptane	< LOQ	1000	200	pass	
n-Hexane	< LOQ	60.0	30.0	pass		n-Pentane	< LOQ	1000	200	pass	
o-Xylene	< LOQ	430	200	pass		Pentanes (sum)	< LOQ	1000	600	pass	
Propane	< LOQ	1000	200	pass		Toluene	< LOQ	180	100	pass	
Total Xylenes	< LOQ	430	400	pass							

2250 BS 220926C

Batch ID or Lot Number: 220926C	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 2 of 3
Reported: 03Oct2022	Started: 30Sep2022	Received: 29Sep2022	


Pesticides


Test ID: T000223008

Methods: TM17

(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)		Dynamic Range (ppb)	Result (ppb)	
Abamectin	282 - 2808	ND		Malathion	297 - 2747	ND
Acephate	40 - 2734	ND		Metalaxyl	40 - 2749	ND
Acetamiprid	41 - 2695	ND		Methiocarb	44 - 2727	ND
Azoxystrobin	48 - 2741	ND		Methomyl	40 - 2714	ND
Bifenazate	42 - 2754	ND		MGK 264 1	167 - 1641	ND
Boscalid	41 - 2722	ND		MGK 264 2	113 - 1149	ND
Carbaryl	40 - 2765	ND		Myclobutanil	41 - 2786	ND
Carbofuran	42 - 2734	ND		Naled	45 - 2807	ND
Chlorantraniliprole	43 - 2817	ND		Oxamyl	40 - 2692	ND
Chlorpyrifos	56 - 2815	ND		Paclobutrazol	45 - 2735	ND
Clofentezine	295 - 2644	ND		Permethrin	290 - 2734	ND
Diazinon	294 - 2756	ND		Phosmet	42 - 2734	ND
Dichlorvos	294 - 2655	ND		Prophos	286 - 2733	ND
Dimethoate	40 - 2656	ND		Propoxur	44 - 2742	ND
E-Fenpyroximate	293 - 2797	ND		Pyridaben	296 - 2760	ND
Etofenprox	42 - 2753	ND		Spinosad A	35 - 2270	ND
Etoxazole	288 - 2773	ND		Spinosad D	48 - 505	ND
Fenoxycarb	42 - 2766	ND		Spiromesifen	291 - 2793	ND
Fipronil	37 - 2724	ND		Spirotetramat	279 - 2739	ND
Flonicamid	51 - 2727	ND		Spiroxamine 1	18 - 1182	ND
Fludioxonil	302 - 2754	ND		Spiroxamine 2	22 - 1576	ND
Hexythiazox	39 - 2801	ND		Tebuconazole	303 - 2766	ND
Imazalil	276 - 2739	ND		Thiacloprid	41 - 2697	ND
Imidacloprid	46 - 2736	ND		Thiamethoxam	43 - 2724	ND
Kresoxim-methyl	42 - 2791	ND		Trifloxystrobin	44 - 2798	ND

Final Approval


Daniel Weidensaul
03Oct2022
01:00:00 PM MDT
PREPARED BY / DATE


Sam Smith
03Oct2022
01:47:00 PM MDT
APPROVED BY / DATE



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794



Report Number: 22-008914/D003.R000
Report Date: 08/04/2022
ORELAP#: OR100028
Purchase Order:
Received: 07/28/22 10:47

Pesticides											
Method: AOAC 2007.01 & EN 15662 (mod)											
Units mg/kg Batch 2206440 Analyze 08/01/22 09:49 AM											
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin	< LOQ	0.25	0.070	pass		Acephate	< LOQ	0.050	0.020	pass	
Acequinocyl	< LOQ	0.030	0.025	pass		Acetamidrid	< LOQ	0.050	0.050	pass	
Aldicarb	< LOQ	0.50	0.100	pass		Allethrin	< LOQ	0.10	0.100	pass	
Atrazine	< LOQ	0.0250	0.025	pass		Azadirachtin	< LOQ	1.0	0.500	pass	
Azoxystrobin	< LOQ	0.010	0.010	pass		Benzovindiflupyr	< LOQ	0.010	0.010	pass	
Bifenazate	< LOQ	0.010	0.010	pass		Bifenthrin	< LOQ	1.0	0.100	pass	
Boscalid	< LOQ	0.010	0.010	pass		Buprofezin	< LOQ	0.020	0.010	pass	
Carbaryl	< LOQ	0.025	0.025	pass		Carbofuran	< LOQ	0.010	0.010	pass	
Chlorantraniliprole	< LOQ	0.020	0.010	pass		Chlorfenapyr	< LOQ	1.5	0.100	pass	
Chlorpyrifos	< LOQ	0.50	0.010	pass		Clofentezine	< LOQ	0.010	0.010	pass	
Clothianidin	< LOQ	0.025	0.025	pass		Coumaphos	< LOQ	0.010	0.010	pass	
Cyantraniliprole	< LOQ	0.010	0.010	pass		Cyfluthrin	< LOQ	0.20	0.200	pass	
Cyhalothrin,lambda	< LOQ	0.0200	0.250	pass		Cypermethrin	< LOQ	0.30	0.300	pass	
Cyprodinil	< LOQ	0.010	0.010	pass		Daminozide	< LOQ	0.10	0.050	pass	
Deltamethrin	< LOQ	0.50	0.500	pass		Diazinon	< LOQ	0.020	0.010	pass	
Dichlorvos	< LOQ	0.050	0.050	pass		Dimethoate	< LOQ	0.010	0.010	pass	
Dimethomorph	< LOQ	0.050	0.050	pass		Dinotefuran	< LOQ	0.050	0.050	pass	
Diuron	< LOQ	0.125	0.125	pass		Dodemorph	< LOQ	0.050	0.050	pass	
Endosulfan I (alpha)	< LOQ	2.5	0.050	pass		Endosulfan II (beta)	< LOQ	2.5	0.050	pass	
Endosulfan sulfate	< LOQ	2.5	0.050	pass		Ethoprophos	< LOQ	0.010	0.010	pass	
Etofenprox	< LOQ	0.050	0.010	pass		Etoxazole	< LOQ	0.020	0.010	pass	
Etridiazole	< LOQ	0.15	0.050	pass		Fenhexamid	< LOQ	0.13	0.100	pass	
Fenoxycarb	< LOQ	0.010	0.010	pass		Fenpyroximate	< LOQ	0.020	0.020	pass	
Fensulfothion	< LOQ	0.010	0.010	pass		Fenthion	< LOQ	0.010	0.010	pass	
Fenvalerate	< LOQ		0.200			Fipronil	< LOQ	0.010	0.010	pass	
Flonicamid	< LOQ	0.025	0.025	pass		Fludioxonil	< LOQ	0.010	0.010	pass	
Fluopyram	< LOQ	0.010	0.010	pass		Hexythiazox	< LOQ	0.010	0.010	pass	
Imazalil	< LOQ	0.010	0.010	pass		Imidacloprid	< LOQ	0.010	0.010	pass	
Iprodione	< LOQ	0.50	0.500	pass		Kinoprene	< LOQ	1.3	0.200	pass	
Kresoxim-methyl	< LOQ	0.15	0.010	pass		Malathion	< LOQ	0.010	0.010	pass	
Metalaxyl	< LOQ	0.010	0.010	pass		Methiocarb	< LOQ	0.010	0.010	pass	
Methomyl	< LOQ	0.025	0.025	pass		Methoprene	< LOQ	2.0	1.00	pass	
Mevinphos	< LOQ	0.025	0.025	pass		MGK-264	< LOQ	0.050	0.050	pass	
Myclobutanil	< LOQ	0.010	0.010	pass		Naled	< LOQ	0.10	0.100	pass	
Novaluron	< LOQ	0.025	0.025	pass		Oxamyl	< LOQ	1.5	0.500	pass	
Paclbutrazole	< LOQ	0.010	0.010	pass		Parathion-Methyl	< LOQ	0.050	0.030	pass	
Permethrin	< LOQ	0.50	0.040	pass		Phenothrin	< LOQ	0.050	0.025	pass	
Phosmet	< LOQ	0.020	0.010	pass		Piperonyl butoxide	< LOQ	1.3	0.200	pass	
Pirimicarb	< LOQ	0.010	0.010	pass		Prallethrin	< LOQ	0.050	0.050	pass	
Propiconazole	< LOQ	0.10	0.010	pass		Propoxur	< LOQ	0.010	0.010	pass	
Pyraclostrobin	< LOQ	0.010	0.010	pass		Pyrethrins (total)	< LOQ	0.050	0.025	pass	
Pyridaben	< LOQ	0.020	0.020	pass		Pyriproxyfen	< LOQ	0.0100	0.010	pass	
Quintozene	< LOQ	0.020	0.020	pass		Resmethrin	< LOQ	0.050	0.020	pass	
Spinetoram	< LOQ	0.010	0.010	pass		Spinosad	< LOQ	0.010	0.010	pass	
Spirodiclofen	< LOQ	0.25	0.250	pass		Spiromesifen	< LOQ	3.0	0.030	pass	
Spirotetramat	< LOQ	0.010	0.010	pass		Spiroxamine	< LOQ	0.10	0.010	pass	



12423 NE Whitaker Way
Portland, OR 97230
503-254-1794



Report Number: 22-008914/D003.R000
Report Date: 08/04/2022
ORELAP#: OR100028
Purchase Order:
Received: 07/28/22 10:47

Pesticides											
Method: AOAC 2007.01 & EN 15662 (mod)						Units mg/kg	Batch 2206440	Analyze 08/01/22 09:49 AM			
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Tebuconazole	< LOQ	0.010	0.010	pass		Tebufenozide	< LOQ	0.010	0.010	pass	
Teflubenzuron	< LOQ	0.025	0.025	pass		Tetrachlorvinphos	< LOQ	0.010	0.010	pass	
Tetramethrin	< LOQ	0.10	0.050	pass		Thiacloprid	< LOQ	0.010	0.010	pass	
Thiamethoxam	< LOQ	0.010	0.010	pass		Thiophanate-Methyl	< LOQ	0.050	0.030	pass	
Trifloxystrobin	< LOQ	0.010	0.010	pass							

Metals										
Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method		Status	Notes	
Arsenic	< LOQ	1.50	mg/kg	0.0794	2206460	08/01/22	AOAC 2013.06 (mod.) ^P	pass		
Cadmium	< LOQ	0.50	mg/kg	0.0794	2206460	08/01/22	AOAC 2013.06 (mod.) ^P	pass		
Lead	< LOQ	0.50	mg/kg	0.0794	2206460	08/01/22	AOAC 2013.06 (mod.) ^P	pass		
Mercury	< LOQ	1.50	mg/kg	0.0397	2206460	08/01/22	AOAC 2013.06 (mod.) ^P	pass		

Mycotoxins										
Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method		Status	Notes	
Aflatoxin B2 [¶]	< LOQ	5.00	µg/kg	5.00	2206451	08/01/22	AOAC 2007.01 & EN 15662 (mod) ^P	pass		
Aflatoxin B1 [¶]	< LOQ	5.00	µg/kg	5.00	2206451	08/01/22	AOAC 2007.01 & EN 15662 (mod) ^P	pass		
Aflatoxin G1 [¶]	< LOQ	5.00	µg/kg	5.00	2206451	08/01/22	AOAC 2007.01 & EN 15662 (mod) ^P	pass		
Aflatoxin G2 [¶]	< LOQ	5.00	µg/kg	5.00	2206451	08/01/22	AOAC 2007.01 & EN 15662 (mod) ^P	pass		
Deoxynivalenol [¶]	< LOQ		µg/kg	200	2206451	08/01/22	AOAC 2007.01 & EN 15662 (mod) ^P			
Fumonisin B1 [¶]	< LOQ		µg/kg	200	2206451	08/01/22	AOAC 2007.01 & EN 15662 (mod) ^P			
Fumonisin B2 [¶]	< LOQ		µg/kg	200	2206451	08/01/22	AOAC 2007.01 & EN 15662 (mod) ^P			
HT2-Toxin [¶]	< LOQ		µg/kg	40.0	2206451	08/01/22	AOAC 2007.01 & EN 15662 (mod) ^P			
Ochratoxin A [¶]	< LOQ	5.00	µg/kg	5.00	2206451	08/01/22	AOAC 2007.01 & EN 15662 (mod) ^P	pass		
Ochratoxin B [¶]	< LOQ		µg/kg	2.00	2206451	08/01/22	AOAC 2007.01 & EN 15662 (mod) ^P			
T2-Toxin [¶]	< LOQ		µg/kg	20.0	2206451	08/01/22	AOAC 2007.01 & EN 15662 (mod) ^P			
Zearalenone [¶]	< LOQ		µg/kg	200	2206451	08/01/22	AOAC 2007.01 & EN 15662 (mod) ^P			