

CERTIFICATE OF ANALYSIS

PRODUCT NAME: CBD Softgels with Melatonin
PRODUCT STRENGTH: 25 mg CBD / 3 mg Melatonin / 3mg CBN
BATCH: 21321B
BEST BY DATE: HEMP: 06/25/2023
EXTRACT LOT: 21E0000846

Click on the links to view third-party reports

Physical Attributes

Test	Method	Specification	Results
Color	Internal	Golden to Amber	PASS
Odor	Internal	No Odor	PASS
Appearance	Internal	Dry, ovoid softgel capsules in container with lid and shrink-band	PASS
Primary Package Eval.	Internal	Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval.	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**: ≥ 25 mg / bottle	31.50 mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: <0.01% THC (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 < 5ppb	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:
10²=100
10³=1,000

Quality Certified

Keegan Schlittler

Keegan Schlittler

Quality Assurance Manager

11/23/2021

Date

SG25M


Batch ID or Lot Number: **21E0000846** Test: **Potency** Reported: **7/30/21**


Matrix: Test ID: Started: USDA License:
 Unit T000153148 7/28/21 N/A

Status: Method: Received: Sampler ID:
 N/A TM14 (HPLC-DAD): Potency - Broad Spectrum Analysis, 0.01% THC (Colorado Panel) 07/22/2021 @ 10:29 AM N/A

CANNABINOID PROFILE

Compound	LOD (mg)	LOQ (mg)	Result (mg)	Result (mg/g)	Notes
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.007	0.018	ND	ND	# of Servings = 1 Sample Weight=0.556g
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.007	0.020	ND	ND	
Cannabidiolic acid (CBDA)	0.065	0.237	ND	ND	
Cannabidiol (CBD)	0.064	0.231	31.500	56.63	
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.083	0.240	ND	ND	
Cannabinolic Acid (CBNA)	0.047	0.137	ND	ND	
Cannabinol (CBN)	0.022	0.063	3.667	6.59	
Cannabigerolic acid (CBGA)	0.069	0.201	ND	ND	
Cannabigerol (CBG)	0.017	0.048	2.040	3.67	
Tetrahydrocannabivarinic Acid (THCVA)	0.059	0.170	ND	ND	
Tetrahydrocannabivarin (THCV)	0.015	0.044	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.027	0.099	ND	ND	
Cannabidivarin (CBDV)	0.015	0.055	0.051*	0.09*	
Cannabichromenic Acid (CBCA)	0.027	0.078	ND	ND	
Cannabichromene (CBC)	0.029	0.085	ND	ND	
Total Cannabinoids			37.258	66.98	
Total Potential THC**			ND	ND	
Total Potential CBD**			31.500	56.63	

 Ryan Weems
 30-Jul-2021
 09:48 AM

 Taylor Brevik
 30-Jul-21
 9:53 AM

PREPARED BY / DATE

APPROVED BY / DATE

Definitions

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)

* Indicates a value below the Limit of Quantitation (LOQ) and above the Limit of Detection (LOD).

** Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.

$$\text{Total THC} = \text{THC} + (\text{THCa} * (0.877)) \text{ and}$$

$$\text{Total CBD} = \text{CBD} + (\text{CBDa} * (0.877))$$

Total Cannabinoids result reflects the absolute sum of all cannabinoids detected.

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.



CDPHE Certified



Certificate #4329.02

SG25M

Batch ID:	21E0000846	Test ID:	T000153149
Type:	Concentrate	Submitted:	07/22/2021 @ 10:29 AM
Test:	Pesticides	Started:	7/26/2021
Method:	TM17 (UHPLC-QQQ LC MS/MS)	Reported:	7/28/2021

PESTICIDE RESIDUE

Compound	Dynamic Range (ppb)	Result (ppb)	Compound	Dynamic Range (ppb)	Result (ppb)
Acephate	45 - 2516	ND*	Malathion	303 - 2516	ND*
Acetamiprid	43 - 2516	ND*	Metalaxyl	42 - 2516	ND*
Abamectin	>275	ND*	Methiocarb	41 - 2516	ND*
Azoxystrobin	44 - 2516	ND*	Methomyl	44 - 2516	ND*
Bifenazate	41 - 2516	ND*	MGK 264 1	172 - 2516	ND*
Boscalid	43 - 2516	ND*	MGK 264 2	123 - 2516	ND*
Carbaryl	42 - 2516	ND*	Myclobutanil	47 - 2516	ND*
Carbofuran	46 - 2516	ND*	Naled	47 - 2516	ND*
Chlorantraniliprole	54 - 2516	ND*	Oxamyl	40 - 2516	ND*
Chlorpyrifos	47 - 2516	ND*	Paclobutrazol	46 - 2516	ND*
Clofentezine	293 - 2516	ND*	Permethrin	289 - 2516	ND*
Diazinon	298 - 2516	ND*	Phosmet	42 - 2516	ND*
Dichlorvos	>253	ND*	Prophos	267 - 2516	ND*
Dimethoate	43 - 2516	ND*	Propoxur	45 - 2516	ND*
E-Fenpyroximate	346 - 2516	ND*	Pyridaben	327 - 2516	ND*
Etofenprox	43 - 2516	ND*	Spinosad A	31 - 2516	ND*
Etoxazole	319 - 2516	ND*	Spinosad D	85 - 2516	ND*
Fenoxycarb	>43	ND*	Spiromesifen	>291	ND*
Fipronil	52 - 2516	ND*	Spirotetramat	>325	ND*
Flonicamid	45 - 2516	ND*	Spiroxamine 1	19 - 2516	ND*
Fludioxonil	>294	ND*	Spiroxamine 2	24 - 2516	ND*
Hexythiazox	39 - 2516	ND*	Tebuconazole	332 - 2516	ND*
Imazalil	281 - 2516	ND*	Thiacloprid	42 - 2516	ND*
Imidacloprid	46 - 2516	ND*	Thiamethoxam	43 - 2516	ND*
Kresoxim-methyl	47 - 2516	ND*	Trifloxystrobin	44 - 2516	ND*

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

N/A

FINAL APPROVAL



 Taylor Brevik
 28-Jul-2021
 9:34 AM



 Sam Smith
 28-Jul-2021
 9:37 AM

PREPARED BY / DATE

APPROVED BY / DATE

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

SG25M

Batch ID or Lot Number: 21321B	Test: Microbial Contaminants	Reported: 11/22/21	
Matrix: Finished Product	Test ID: T000177483	Started: 11/19/21	USDA License: N/A
Status: N/A	Methods: TM25 (qPCR) TM24, TM26, TM27(Culture Plating): Microbial (Colorado Panel)	Received: 11/19/2021 @ 10:17 AM	Sampler ID: N/A

MICROBIAL CONTAMINANTS DETERMINATION

Contaminant	Method	LOD	LLOQ	ULOQ	Result	Notes
Total Aerobic Count*	TM-26, Culture Plating	10 ² CFU/g	10 ³ CFU/g	1.5x10 ⁵ CFU/g	None Detected	Free from visual mold, mildew, and foreign matter
Total Coliforms*	TM-27, Culture Plating	10 ¹ CFU/g	10 ² CFU/g	1.5x10 ⁴ CFU/g	None Detected	
Total Yeast and Mold*	TM-24, Culture Plating	10 ¹ CFU/g	10 ² CFU/g	1.5x10 ⁴ CFU/g	None Detected	
E. coli (STEC)	TM-25, PCR	1 CFU/25 g	NA	NA	Absent	
Salmonella	TM-25, PCR	1 CFU/25 g	NA	NA	Absent	

Eden Thompson
 Eden Thompson-Wright
 11/22/2021
 12:50:00 PM

PREPARED BY / DATE

Jackson Osaghae-Nosa
 Jackson Osaghae-Nosa
 11/22/2021
 1:45:00 PM

APPROVED BY / DATE

Definitions

LOD = Limit of Detection | LLOQ = Lower Limit of Quantitation | ULOQ = Upper Limit of Quantitation

 CFU/g = Colony Forming Units per Gram | STEC = Shiga Toxin-Producing *E. coli*

* 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

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SG25M


Batch ID or Lot Number: 21E0000846	Test: Metals	Reported: 8/4/21	
Matrix: Unit Co	Test ID: T000153151	Started: 7/28/21	USDA License: N/A
Status: N/A	Method: TM19 (ICP-MS); Heavy Metals (Colorado Panel)	Received: 07/22/2021 @ 10:29 AM	Sampler ID: N/A

HEAVY METALS DETERMINATION

Compound	Dynamic Range (ppb)	Result (ppb)	Notes
Arsenic	0.052 - 5.23	ND	Amendment to certificate T000153151, certificate updated to Colorado Compliance format.
Cadmium	0.044 - 4.42	ND	
Mercury	0.044 - 4.38	ND	
Lead	0.044 - 4.37	ND	

 Ryan Weems
4-Aug-21
10:45 AM

PREPARED BY / DATE

 Sam Smith
4-Aug-21
10:53 AM

APPROVED BY / DATE

Definitions

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

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SG25M


Batch ID or Lot Number: 21E0000846	Test: Mycotoxins	Reported: 7/29/21	
Matrix: Concentrate	Test ID: T000153153	Started: 7/28/21	USDA License: N/A
Status: N/A	Method: TM18 (UHPLC-QQQ LCMS/MS): Mycotoxins (Colorado Panel)	Received: 07/22/2021 @ 10:29 AM	Sampler ID: N/A

MYCOTOXIN DETERMINATION

Compound	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	3.9 - 128.4	ND	N/A
Aflatoxin B1	1 - 32.5	ND	
Aflatoxin B2	1.1 - 32.5	ND	
Aflatoxin G1	1.1 - 31.2	ND	
Aflatoxin G2	1.2 - 30.8	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	


 Sam Smith
 29-Jul-21
 8:42 AM

PREPARED BY / DATE


 Chris Jungling
 29-Jul-21
 3:32 PM

APPROVED BY / DATE

Definitions

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

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SG25M

Batch ID or Lot Number: 21E0000846	Test: Residual Solvents	Reported: 7/28/21	
Matrix: N/A	Test ID: T000153152	Started: 7/27/21	USDA License: N/A
Status: N/A	Methods: TM04 (GC-MS): Residual Solvents (Colorado Panel)	Received: 07/22/2021 @ 10:29 AM	Sampler ID: N/A

RESIDUAL SOLVENTS DETERMINATION

Solvent	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	92 - 1844	*ND	
Butanes (Isobutane, n-Butane)	218 - 4355	*ND	
Methanol	77 - 1534	*ND	
Pentane	105 - 2095	*ND	
Ethanol	119 - 2382	*ND	
Acetone	120 - 2393	*ND	
Isopropyl Alcohol	128 - 2568	*ND	
Hexane	7 - 144	*ND	
Ethyl Acetate	120 - 2408	*ND	
Benzene	0 - 5	*ND	
Heptanes	114 - 2284	*ND	
Toluene	22 - 437	*ND	
Xylenes (m,p,o-Xylenes)	159 - 3188	*ND	

 Taylor Brevik
28-Jul-21
1:15 PM

 Sam Smith
28-Jul-21
1:19 PM

PREPARED BY / DATE

APPROVED BY / DATE

Definitions

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

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