

# CERTIFICATE OF ANALYSIS

**PRODUCT NAME:** Nano CBD Softgels  
**PRODUCT STRENGTH:** 25 mg CBD  
**TINCTURE BATCH:** 221220A  
**BEST BY DATE:** 10/20/2024  
**HEMP EXTRACT LOT:** 22BL08262

### Physical Attributes

Test	Method	Specification	Results
Color	Joy Internal	Golden to Amber	PASS
Odor	Joy Internal	No Odor	PASS
Appearance	Joy Internal	Dry, ovoid softgel capsules in container with lid and shrink-band	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
<b>Potency - Total CBD</b>	HPLC-UV DAD	*NLT 25 mg / softgel	<b>28.5mg</b>	PASS
<b>Potency - D9-THC</b>	HPLC-UV DAD	LOQ: <0.01% (broad spectrum)	<b>ND</b>	PASS
<b>Expanded Pesticide Panel</b>	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	<b>Below LOQ</b>	PASS
<b>Microbial</b> Escherichia coli (STEC)	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	<b>Absent</b>	PASS
<b>Microbial</b> Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	<b>Absent</b>	PASS
<b>Microbial</b> Yeast and Mold	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 <sup>2</sup> CFU/gram	<b>Below LOQ</b>	PASS
<b>Microbial</b> Total Coliforms*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 <sup>2</sup> CFU/gram	<b>Below LOQ</b>	PASS
<b>Microbial</b> Total Aerobic Count*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 <sup>3</sup> CFU/gram	<b>Below LOQ</b>	PASS
<b>Heavy Metals Panel</b>	ICP-MS	Arsenic (As): ≤1.5 ppm Cadmium (Cd): ≤0.5 ppm Lead (Pb): ≤0.5 ppm Mercury (Hg): ≤1.5 ppm	<b>Below LOQ</b>	PASS
<b>Mycotoxins</b>	ICP-MS	Total Aflatoxins <20 ppb† Aflatoxin B1 < 5 ppb Ochratoxin < 5ppb	<b>Below LOQ</b>	PASS
<b>Residual Solvents</b>	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	<b>Below LOQ</b>	PASS

\* Level of Quantitation, † Parts Per Million ‡ Part Per Billion CFU/g=Colony Forming Units per Gram  
 \*Nothing Less Than  
 10<sup>2</sup>=100 CFU  
 10<sup>3</sup>=1,000 CFU

Quality Certified

Name



Date

1/4/2023

## CBD Softgels 25mg


Batch ID or Lot Number: 221220A	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 1 of 5
Reported: 30Nov2022	Started: 30Nov2022	Received: 29Nov2022	


## Cannabinoids - Colorado Compliance

Test ID: T000229064  
Methods: TM14 (HPLC-DAD): Potency – Standard

Cannabinoid Analysis	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.006	0.022	<LOQ	<LOQ	
Cannabichromenic Acid (CBCA)	0.006	0.020	ND	ND	
Cannabidiol (CBD)	0.022	0.059	7.649	76.49	
Cannabidiolic Acid (CBDA)	0.022	0.061	ND	ND	
Cannabidivarin (CBDV)	0.005	0.014	0.029	0.29	
Cannabidivarinic Acid (CBDVA)	0.009	0.025	ND	ND	
Cannabigerol (CBG)	0.004	0.013	0.496	4.96	
Cannabigerolic Acid (CBGA)	0.015	0.052	ND	ND	
Cannabinol (CBN)	0.005	0.016	ND	ND	
Cannabinolic Acid (CBNA)	0.010	0.036	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.018	0.062	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.016	0.057	ND	ND	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.014	0.050	ND	ND	
Tetrahydrocannabivarin (THCV)	0.003	0.011	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.013	0.044	ND	ND	
<b>Total Cannabinoids</b>			<b>8.174</b>	<b>81.74</b>	
Total Potential THC			ND	ND	
Total Potential CBD			7.649	76.49	

### Final Approval

  
Samantha Smith  
01Dec2022  
05:24:00 PM MST  
PREPARED BY / DATE

  
Karen Winternheimer  
01Dec2022  
05:30:00 PM MST  
APPROVED BY / DATE


## Heavy Metals - Colorado Compliance

Test ID: T000229067  
Methods: TM19 (ICP-MS): Heavy

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.05 - 4.64	ND	
Cadmium	0.04 - 4.34	ND	
Mercury	0.04 - 4.41	ND	
Lead	0.05 - 4.77	ND	

### Final Approval

  
Colin Hendrickson  
01Dec2022  
10:03:00 AM MST  
PREPARED BY / DATE

  
Samantha Smith  
01Dec2022  
10:08:00 AM MST  
APPROVED BY / DATE

## CBD Softgels 25mg

Batch ID or Lot Number: <b>221220A</b>	Test: <b>Microbial Contaminants</b>	Reported: <b>30Dec2022</b>	USDA License: N/A
Matrix: Finished Product	Test ID: T000231396	Started: 27Dec2022	Sampler ID: N/A
	Method(s): TM25 (qPCR) TM24, TM26, TM27 (Culture Plating): Microbial (Colorado Panel)	Received: 21Dec2022	Status: Active

## Microbial Contaminants

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

## Final Approval



Brett Hudson  
30Dec2022  
03:32:00 PM MST

PREPARED BY / DATE



Brianne Maillot  
31Dec2022  
05:32:00 PM MST

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/937475e2-b6e4-4edf-94c2-f8563043c0b3>

### 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: 10<sup>2</sup> = 100 CFU, 10<sup>3</sup> = 1,000 CFU, 10<sup>4</sup> = 10,000 CFU, 10<sup>5</sup> = 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

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**CBD Softgels 25mg**

Batch ID or Lot Number: <b>221220A</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 2 of 5
Reported: <b>30Nov2022</b>	Started: 30Nov2022	Received: 29Nov2022	


**Residual Solvents -  
Colorado Compliance**

Test ID: T000229068


Methods: TM04 (GC-MS): Residual

Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	78 - 1570	ND	
Butanes (Isobutane, n-Butane)	153 - 3057	ND	
Methanol	51 - 1020	ND	
Pentane	82 - 1645	ND	
Ethanol	82 - 1638	ND	
Acetone	83 - 1651	ND	
Isopropyl Alcohol	87 - 1747	ND	
Hexane	5 - 99	ND	
Ethyl Acetate	85 - 1692	ND	
Benzene	0.2 - 3.4	ND	
Heptanes	87 - 1741	ND	
Toluene	15 - 303	ND	
Xylenes (m,p,o-Xylenes)	111 - 2213	ND	

**Final Approval**

  
Samantha Smith  
02Dec2022  
06:37:00 PM MST

PREPARED BY / DATE

  
Karen Winternheimer  
02Dec2022  
06:41:00 PM MST

APPROVED BY / DATE

## CBD Softgels 25mg

Batch ID or Lot Number: <b>221220A</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 4 of 5
Reported: <b>30Nov2022</b>	Started: 30Nov2022	Received: 29Nov2022	

### Pesticides


Test ID: T000229065


Methods: TM17

(LC-QQ LC MS/MS)

	Dynamic Range (ppb)	Result (ppb)		Dynamic Range (ppb)	Result (ppb)
Abamectin	335 - 2667	ND	Malathion	290 - 2707	ND
Acephate	41 - 2767	ND	Metalaxyl	38 - 2744	ND
Acetamiprid	42 - 2742	ND	Methiocarb	44 - 2686	ND
Azoxystrobin	42 - 2720	ND	Methomyl	41 - 2754	ND
Bifenazate	40 - 2728	ND	MGK 264 1	166 - 1627	ND
Boscalid	44 - 2714	ND	MGK 264 2	116 - 1113	ND
Carbaryl	43 - 2725	ND	Myclobutanil	38 - 2682	ND
Carbofuran	42 - 2708	ND	Naled	42 - 2756	ND
Chlorantraniliprole	43 - 2667	ND	Oxamyl	40 - 2746	ND
Chlorpyrifos	38 - 2642	ND	Paclobutrazol	48 - 2701	ND
Clofentezine	279 - 2733	ND	Permethrin	294 - 2686	ND
Diazinon	276 - 2737	ND	Phosmet	40 - 2702	ND
Dichlorvos	280 - 2790	ND	Prophos	290 - 2696	ND
Dimethoate	38 - 2742	ND	Propoxur	42 - 2704	ND
E-Fenpyroximate	294 - 2676	ND	Pyridaben	305 - 2654	ND
Etofenprox	42 - 2681	ND	Spinosad A	32 - 2231	ND
Etoxazole	306 - 2670	ND	Spinosad D	49 - 485	ND
Fenoxycarb	42 - 2736	ND	Spiromesifen	290 - 2693	ND
Fipronil	41 - 2666	ND	Spirotetramat	278 - 2722	ND
Flonicamid	47 - 2713	ND	Spiroxamine 1	18 - 1128	ND
Fludioxonil	267 - 2705	ND	Spiroxamine 2	22 - 1539	ND
Hexythiazox	39 - 2705	ND	Tebuconazole	285 - 2720	ND
Imazalil	250 - 2752	ND	Thiacloprid	42 - 2742	ND
Imidacloprid	47 - 2728	ND	Thiamethoxam	39 - 2769	ND
Kresoxim-methyl	38 - 2747	ND	Trifloxystrobin	43 - 2732	ND

### Final Approval

  
 Sam Smith  
 06Dec2022  
 11:07:00 AM MST  
 PREPARED BY / DATE

  
 Karen Winternheimer  
 06Dec2022  
 11:11:00 AM MST  
 APPROVED BY / DATE

**CBD Softgels 25mg**


Batch ID or Lot Number: <b>221220A</b>	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 5 of 5
Reported: <b>30Nov2022</b>	Started: 30Nov2022	Received: 29Nov2022	


**Mycotoxins - Colorado Compliance**

Test ID: T000229069  
Methods: TM18 (UHPLC-QQQ)

LCMS/MS: Mycotoxins	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	4.52 - 126.01	ND	N/A
Aflatoxin B1	0.92 - 32.18	ND	
Aflatoxin B2	0.86 - 32.12	ND	
Aflatoxin G1	0.95 - 32.24	ND	
Aflatoxin G2	0.99 - 32.47	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

**Final Approval**

  
Sam Smith  
07Dec2022  
08:08:00 AM MST  
PREPARED BY / DATE

  
Karen Winternheimer  
07Dec2022  
08:09:00 AM MST  
APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/4cbe7970-294d-43a6-b075-178f24bd3550>

**Definitions**  
LOD = Limit of Detection, ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation, PPB = Parts per Billion, % = % (w/w) = Percent (weight of analyte / weight of product). ND = None Detected (defined by dynamic range of the method). Total Potential Delta 9-THC or CBD is calculated to take into account the loss of a carboxyl group during decarboxylation step, using the following formulas: Total Potential Delta 9-THC = Delta 9-THC + (Delta 9-THCa \*(0.877)) and Total CBD = CBD + (CBDa \*(0.877)). Fail equates to a concentration level of Delta 9-THC, on a dry weight basis, higher than 0.3 percent + or - the measurement uncertainty. Total Potential THC is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step. Total THC = THC + (THCa \*(0.877)). ALOQ = Above Limit Of Quantitation (defined by dynamic range of the method), CFU/g = Colony Forming Units per Gram. Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form. Examples: 10<sup>2</sup> = 100 CFU, 10<sup>3</sup> = 1,000 CFU, 10<sup>4</sup> = 10,000 CFU, 10<sup>5</sup> = 100,000 CFU.

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