

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Nano CBD Softgels
PRODUCT STRENGTH: 100 mg CBD
TINCTURE BATCH: 241108A
BEST BY DATE: 7/31/2024
HEMP EXTRACT LOT: 24072001

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
Potency - Total CBD	HPLC-UV DAD	*NLT 100 mg / softgel	95mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: >0.01% (broad spectrum)	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	Below LOQ	PASS
Microbial Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	Below LOQ	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

Quality Certified



12/3/24

Date



Certificate of Analysis

Compliance Test

Batch # 241108A Test Reg State: Colorado
Batch Date: 2024-07-22
Extracted From: Hemp

Order Date: 2024-07-26
Sample # AAFU470

Sampling Date: 2024-08-01
Lab Batch Date: 2024-08-01
Orig. Completion Date: 2024-08-06

Number of Units: 1
Net Weight per Unit: 360.000 mg



**Potency
Tested**



**Pesticides
Passed**



**Mycotoxins
Passed**



**Heavy Metals
Passed**



**Residual Solvents
Passed**



**Microbiology Petrifilm
Passed**

Product Image

Potency 10
Specimen Weight: 507.430 mg

Tested
SOP13.001 (LCUV)



Potency Summary

Total Active THC None Detected		Total Active CBD 26.510%	
Total CBG 1.777%		Total CBN None Detected	
Total Cannabinoids 28.405%		Total Active CBD 95.436 mg	
6.397 mg		102.258 mg	

Pieces For Panel: 85

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
CBD	50.000	5.40E-5	0.015	265.100	26.510
CBG	50.000	2.48E-4	0.015	17.770	1.777
CBDV	50.000	6.50E-5	0.015	1.180	0.118
CBC	50.000	1.80E-5	0.015	<LOQ	<LOQ
CBDA	50.000	1.00E-5	0.015	<LOQ	<LOQ
CBGA	50.000	8.00E-5	0.015	<LOQ	<LOQ
CBN	50.000	1.40E-5	0.015	<LOQ	<LOQ
Delta-9 THC	50.000	1.30E-5	0.015	<LOQ	<LOQ
THCA-A	50.000	3.20E-5	0.015	<LOQ	<LOQ
THCV	50.000	7.00E-6	0.015	<LOQ	<LOQ
Total Active CBD	50.000			265.100	26.510
Total Active THC	50.000			<LOQ	<LOQ


Aixia Sun Lab Director/Principal Scientist
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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 THC = 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, (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. Pesticides indicators: 1=FL LOD/LOQ/AL; 2= CO LOD/LOQ/AL; 3 = CO LOD/ACS CO LOQ Revised report- see statement of amendment above.

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Certificate of Analysis
Compliance Test

Batch # 241108A Test Reg State: Colorado
Batch Date: 2024-07-22
Extracted From: Hemp

Order Date: 2024-07-26 Sample # AAFU470
Sampling Date: 2024-08-01 Lab Batch Date: 2024-08-01
Initial Gross Weight: 102.400 g Number of Units: 1
Net Weight per Unit: 360.000 mg
Orig. Completion Date: 2024-08-06

Mycotoxins - CO **Passed**
Specimen Weight: 584.200 mg SOP13.007 (LCMS)

Dilution Factor: 2.570

Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)
Aflatoxin B1	3.7250E-1	2.5	5	<LOQ	Ochratoxin A	1.8997E-1	3.5	5	<LOQ
Aflatoxin Total		2.5	20	<LOQ					

Residual Solvents - CO **Passed**
Specimen Weight: 314.400 mg SOP13.039 (GCMS)

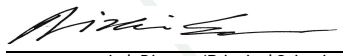
Dilution Factor: 84.930

Analyte	LOD (ppm)	LOQ (ppm)	Action Limit (ppm)	Result (ppm)	Analyte	LOD (ppm)	LOQ (ppm)	Action Limit (ppm)	Result (ppm)
Acetone	0.015	2.08	1000	<LOQ	Isopropyl alcohol	0.0048	1.39	1000	<LOQ
Benzene	0.0002	0.02	2	<LOQ	Methanol	0.0005	0.69	600	<LOQ
Butanes	0.4167	2.5	1000	<LOQ	Pentane	0.037	2.08	1000	<LOQ
Ethanol	0.0021	2.78	NA	<LOQ	Propane	0.031	5.83	1000	<LOQ
Ethyl Acetate	0.0012	1.11	1000	<LOQ	Toluene	0.0009	2.92	180	<LOQ
Heptane	0.0013	1.39	1000	<LOQ	Total Xylenes	0.0001	2.92	430	<LOQ
Hexane	0.068	1.17	60	<LOQ					

National Panel Heavy Metals **Passed**
Specimen Weight: 251.800 mg SOP13.055 (ICP-MS)

Dilution Factor: 198.570

Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Limit (ppb)	Result (ppb)
Antimony (Sb)	0.032	1000	120000	<LOQ	Molybdenum (Mo)	0.009	500	300000	<LOQ
Arsenic (As)	0.014	100	200	<LOQ	Nickel (Ni)	0.352	250	20000	<LOQ
Barium (Ba)	0.056	15000	140000	<LOQ	Osmium (Os)	0.003	50	10000	<LOQ
Cadmium (Cd)	0.002	100	500	<LOQ	Palladium (Pd)	0.017	50	10000	<LOQ
Chromium (Cr)	0.052	150	1100000	<LOQ	Platinum (Pt)	0.008	50	10000	<LOQ
Cobalt (Co)	0.003	150	5000	<LOQ	Rhodium (Rh)	0.003	50	10000	<LOQ
Copper (Cu)	0.059	1500	300000	<LOQ	Ruthenium (Ru)	0.002	50	10000	<LOQ
Gold (Au)	0.021	50	10000	<LOQ	Selenium (Se)	4.631	6500	15000	<LOQ
Iridium (Id)	0.001	50	10000	<LOQ	Silver (Ag)	0.005	350	15000	<LOQ
Lead (Pb)	0.006	250	500	<LOQ	Thallium (Tl)	0.006	400	800	<LOQ
Lithium (Li)	0.301	1250	55000	<LOQ	Tin (Sn)	0.047	3000	600000	<LOQ
Mercury (Hg)	0.014	50	3000	<LOQ	Vanadium (V)	0.038	50	10000	<LOQ


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Certificate of Analysis

Compliance Test

Batch # 241108A
Batch Date: 2024-07-22
Extracted From: Hemp

Test Reg State: Colorado

Order Date: 2024-07-26
Sample # AAFU470

Sampling Date: 2024-08-01
Lab Batch Date: 2024-08-01
Orig. Completion Date: 2024-08-06

Initial Gross Weight: 102.400 g

Number of Units: 1
Net Weight per Unit: 360.000 mg

National Panel Pesticides

Specimen Weight: 584.200 mg

Passed
SOP13.007 (LCMS/GCMS)

Dilution Factor: 2.570

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 ¹	0.435	9	300	<LOQ	Hexythiazox ¹	0.045	9.6	2000	<LOQ	Cyantraniliprole ²	0.006004	9.6	10	<LOQ
Acephate ¹	0.467	9.6	3000	<LOQ	Imazail ¹	0.639	9.6	100	<LOQ	Cyprodinil ²	0.001141	9.6	10	<LOQ
Acequinocyl ¹	0.801	9.6	2000	<LOQ	Imidacloprid ¹	0.159	9.6	3000	<LOQ	Dinotefuran ²	0.236975	9.6	50	<LOQ
Acetamidiprid ¹	0.080	9.6	3000	<LOQ	Kresoxim Methyl ¹	0.268	9.6	1000	<LOQ	Endosulfan-alpha ²	12.22	30	2500	<LOQ
Aldicarb ¹	0.124	9.6	100	<LOQ	Malathion ¹	0.410	9.6	2000	<LOQ	Endosulfan-beta ²	22.76	30	2500	<LOQ
Azoxystrobin ¹	0.683	9.6	3000	<LOQ	Metalaxyl ¹	0.749	9.6	3000	<LOQ	Etridiazole ²	4.02	9.6	150	<LOQ
Bifenazate ¹	0.121	9.6	3000	<LOQ	Methiocarb ¹	0.099	9.6	100	<LOQ	Fensulfthion ²	0.000794	9.6	10	<LOQ
Bifenthrin ¹	0.082	9.6	500	<LOQ	Methomyl ¹	0.121	9.6	100	<LOQ	Fenthion ²	4.911315	9.6	10	<LOQ
Boscalid ¹	0.153	9.6	3000	<LOQ	methyl-Parathion ¹	3.065	9.6	100	<LOQ	Fluopyram ²	1.12E-9	9.6	10	<LOQ
Captan ¹	8.966	48	3000	<LOQ	Mevinphos ¹	1.370	9.6	100	<LOQ	Iprodione ²	0.105543	9.6	500	<LOQ
Carbaryl ¹	0.118	9.6	500	<LOQ	Myclobutanil ¹	0.571	9.6	3000	<LOQ	Kinoprene ²	3.4	441.6	1250	<LOQ
Carbofuran ¹	0.178	9.6	100	<LOQ	Naled ¹	0.083	9.6	500	<LOQ	Novaluron ²	0.000205	9.6	25	<LOQ
Chlorantraniliprole ¹	0.052	9.6	3000	<LOQ	Oxamyl ¹	0.123	9.6	500	<LOQ	Pirimicarb ²	0.0000566	9.6	10	<LOQ
Chlordane ¹	3.121	9.6	100	<LOQ	Paclobutrazol ¹	0.123	9.6	100	<LOQ	Pyraclostrobin ²	5.31E-7	9.6	10	<LOQ
Chlorfenapyr ¹	0.139	9.6	100	<LOQ	Permethrin ¹	0.718	9.6	1000	<LOQ	Resmethrin ²	0.068013	9.6	50	<LOQ
Chlormequat Chloride ¹	0.783	9.6	3000	<LOQ	Phosmet ¹	0.301	9.6	200	<LOQ	Tebufenozide ²	0.018121	9.6	10	<LOQ
Chlorpyrifos ¹	0.271	9.6	100	<LOQ	Piperonylbutoxide ¹	0.217	9.6	3000	<LOQ	Teflubenzuron ²	0.01662	9.6	25	<LOQ
Clofentezine ¹	0.119	9.6	500	<LOQ	Prallethrin ¹	1.365	9.6	400	<LOQ	Tetrachlorvinphos ²	0.839125	9.6	10	<LOQ
Coumaphos ¹	0.129	9.6	100	<LOQ	Propiconazole ¹	0.259	9.6	1000	<LOQ	Atrazine ³	0.379918	9.6	9.6	<LOQ
Cyfluthrin ¹	7.730	48	1000	<LOQ	Propoxur ¹	0.147	9.6	100	<LOQ	Buprofezin ³	1.66E-9	9.6	9.6	<LOQ
Cypermethrin ¹	0.887	9.6	1000	<LOQ	Pyrethrins ¹	0.256	1.4	1000	<LOQ	Deltamethrin ³	0.492837	9.6	9.6	<LOQ
Daminozide ¹	1.797	9.6	100	<LOQ	Pyridaben ¹	0.059	9.6	3000	<LOQ	Diuron ³	0.006862	9.6	9.6	<LOQ
Diazinon ¹	1.328	9.6	200	<LOQ	Spinetoram ¹	0.346	9.6	3000	<LOQ	Dodemorph ³	6.47E-12	9.6	9.6	<LOQ
Dichlorvos ¹	0.465	9.6	100	<LOQ	Spinosad ¹	0.028	2.39	3000	<LOQ	Endosulfan sulfate ³	0.88376	9.6	2500	<LOQ
Dimethoate ¹	0.366	9.6	100	<LOQ	Spiromesifen ¹	0.291	9.6	3000	<LOQ	Fenvalerate ³	0.597752	9.6	9.6	<LOQ
Dimethomorph ¹	0.272	9.6	3000	<LOQ	Spirotetramat ¹	0.141	9.6	3000	<LOQ	Lambda Cyhalothrin ³	0.116859	9.6	9.6	<LOQ
Ethoprophos ¹	0.192	9.6	100	<LOQ	Spiroxamine ¹	0.119	9.6	100	<LOQ	Methoprene ³	1.148463	9.6	9.6	<LOQ
Etofenprox ¹	0.116	9.6	100	<LOQ	Tebuconazole ¹	1.48E-14	9.6	1000	<LOQ	MGK-264 ³	0.002068	7.4	7.4	<LOQ
Etoxazole ¹	0.570	9.6	1500	<LOQ	Thiacloprid ¹	0.397	9.6	100	<LOQ	Pentachloronitrobenzen (Quintozene)	1.817	9.6	200	<LOQ
Fenhexamid ¹	1.011	9.6	3000	<LOQ	Thiamethoxam ¹	0.104	9.6	1000	<LOQ	Phenothrin ³	0.000000212	9.6	9.6	<LOQ
Fenoxycarb ¹	0.169	9.6	100	<LOQ	Trifloxystrobin ¹	0.088	9.6	3000	<LOQ	Pyrproxifen ³	0.0000958	9.6	9.6	<LOQ
Fenpyroximate ¹	0.139	9.6	2000	<LOQ	Allethrin ²	0.472436	9.6	100	<LOQ	Spirodiclofen ³	0.373769	9.6	9.6	<LOQ
Fipronil ¹	0.605	9.6	100	<LOQ	Azadirachtin ²	0.003071	9.6	500	<LOQ	Tetramethrin ³	0.0000992	9.6	9.6	<LOQ
Flonicamid ¹	0.128	9.6	2000	<LOQ	Benzovindiflupyr ²	0.012567	9.6	10	<LOQ	Thiabendazole ³	0.001251	9.6	9.6	<LOQ
Fludioxonil ¹	0.521	9.6	3000	<LOQ	Clothianidin ²	0.000399	9.6	25	<LOQ	Thiophanate-methyl ³	0.000223	9.6	9.6	<LOQ

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Certificate of Analysis

Compliance Test

Batch # 241108A
Batch Date: 2024-11-08
Extracted From: hemp

Test Reg State: Colorado

Order # PRO241115-040001
Order Date: 2024-11-15
Sample # AAGD629

Sampling Date: 2024-11-18
Lab Batch Date: 2024-11-18
Completion Date: 2024-11-22

Initial Gross Weight: 326.200 g



Product Image



Pathogenic
Passed



Microbiology Petrifilm
Passed

Pathogenic SE (qPCR) - CO

Specimen Weight: 25.800 g

Dilution Factor: 1.000

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

Passed
SOP13.029
(qPCR)

Result (cfu/g)
Passed



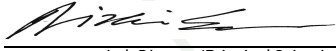
Microbiology (Petrifilm) - CO

Specimen Weight: 1001.100 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)


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