# JOYORGANICS

# **CERTIFICATE OF ANALYSIS**

**PRODUCT NAME: PRODUCT STRENGTH:** TINCTURE BATCH: **BEST BY DATE: HEMP EXTRACT LOT:** 

Nano CBD Softgels with Melatonin 25 mg CBD / 3 mg Melatonin / 3mg CBN 230605A, 231005A

4/17/2025

SG25M-4180

#### Physical Atttributes

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	*NTL 25mg / softgel	29.6mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: <0.01% THC (Broad Spectrum)	ND	PASS
Expanded Pesticide Panel	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	ND	PASS
<b>Microbial</b> Escherichia coli (STEC)	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	Absent	PASS
<b>Microbial</b> Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	Absent	PASS
<b>Microbial</b> Yeast and Mold	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10^2 CFU/gram	Below LOQ	PASS
<b>Microbial</b> 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
<b>Residual Solvents</b>	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 10^2=100 CFU 10^3=1,000 CFU

Quality Certified

D C Name

Date

6/28/2023

2519 S. Shields St. #1042, Fort Collins, CO 80526 Tel: (833) 569-7223 www.joyorganics.com

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FO-106 Certificate of Analysis Rev. 1.1 - Effective Date: 6/29/2022



Batch ID or Lot Number:	Test:	Reported:	USDA License:
230605A	<b>Potency</b>	<b>13May2023</b>	N/A
Matrix:	Test ID:	Started:	Sampler ID:
Unit	T000243633	11May2023	N/A
	Method(s): TM14 (HPLC-DAD): Potency – Standard Cannabinoid Analysis	Received: 09May2023	Status: Active

Cannabinoids	LOD (mg)	LOQ (mg)	Result (mg)	<b>Result</b> (mg/g)	Notes
Cannabichromene (CBC)	0.057	0.171	ND	ND	# of Servings = 1
Cannabichromenic Acid (CBCA)	0.052	0.157	ND	ND	Sample
Cannabidiol (CBD)	0.166	0.447	29.675	53.91	Weight=0.55g
Cannabidiolic Acid (CBDA)	0.170	0.458	ND	ND	
Cannabidivarin (CBDV)	0.039	0.106	<loq< td=""><td><loq< td=""><td></td></loq<></td></loq<>	<loq< td=""><td></td></loq<>	
Cannabidivarinic Acid (CBDVA)	0.071	0.191	ND	ND	
Cannabigerol (CBG)	0.032	0.097	1.702	3.09	
Cannabigerolic Acid (CBGA)	0.135	0.406	ND	ND	
Cannabinol (CBN)	0.042	0.127	3.385	6.15	
Cannabinolic Acid (CBNA)	0.092	0.277	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.160	0.484	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.146	0.440	ND	ND	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.129	0.389	ND	ND	
Tetrahydrocannabivarin (THCV)	0.029	0.088	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.114	0.343	ND	ND	
Total Cannabinoids			34.762	63.15	
Total Potential THC			ND	ND	
Total Potential CBD			29.675	53.91	

## **Final Approval**

PREPARED BY / DATE

Karen Winternheimer 13May2023 12:32:00 PM MDT

amantha

Sam Smith 13May2023 12:34:00 PM MDT



APPROVED BY / DATE

https://results.botanacor.com/api/v1/coas/uuid/3f98d180-1505-4991-8685-7ee48f465998

#### Definitions

% = % (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)).

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.







Batch ID or Lot Number:	Test:	Reported:	USDA License:	
230605A	<b>Pesticides</b>	<b>18May2023</b>	NA	
Matrix:	Test ID:	Started:	Sampler ID:	
Concentrate	T000243634	17May2023	NA	
	Method(s): TM17 (LC-QQ LC MS/MS)	Received: 09May2023	Status: NA	

Pesticides	Dynamic Range (ppb)	Result (ppb)		<b>Dynamic Range</b> (ppb)	Result (ppb)
Abamectin	287 - 2721	ND	Malathion	280 - 2746	ND
Acephate	42 - 2676	ND	Metalaxyl	42 - 2748	ND
Acetamiprid	40 - 2706	ND	Methiocarb	44 - 2778	ND
Azoxystrobin	40 - 2722	ND	Methomyl	41 - 2741	ND
Bifenazate	41 - 2732	ND	MGK 264 1	171 - 1688	ND
Boscalid	40 - 2717	ND	MGK 264 2	116 - 1076	ND
Carbaryl	38 - 2735	ND	Myclobutanil	48 - 2749	ND
Carbofuran	40 - 2721	ND	Naled	39 - 2757	ND
Chlorantraniliprole	35 - 2741	ND	Oxamyl	41 - 2735	ND
Chlorpyrifos	39 - 2776	ND	Paclobutrazol	40 - 2710	ND
Clofentezine	282 - 2744	ND	Permethrin	298 - 2771	ND
Diazinon	275 - 2730	ND	Phosmet	42 - 2720	ND
Dichlorvos	256 - 2686	ND	Prophos	272 - 2737	ND
Dimethoate	40 - 2705	ND	Propoxur	42 - 2722	ND
E-Fenpyroximate	287 - 2791	ND	Pyridaben	303 - 2724	ND
Etofenprox	41 - 2746	ND	Spinosad A	33 - 2091	ND
Etoxazole	305 - 2725	ND	Spinosad D	70 - 671	ND
Fenoxycarb	10 - 2732	ND	Spiromesifen	287 - 2754	ND
Fipronil	31 - 2693	ND	Spirotetramat	267 - 2771	ND
Flonicamid	47 - 2768	ND	Spiroxamine 1	19 - 1199	ND
Fludioxonil	270 - 2725	ND	Spiroxamine 2	25 - 1549	ND
Hexythiazox	42 - 2755	ND	Tebuconazole	281 - 2741	ND
Imazalil	284 - 2751	ND	Thiacloprid	42 - 2674	ND
Imidacloprid	43 - 2757	ND	Thiamethoxam	40 - 2760	ND
Kresoxim-methyl	45 - 2766	ND	Trifloxystrobin	42 - 2709	ND

## **Final Approval**

PREPARED BY / DATE

Karen Winternheimer 18May2023 06:53:00 AM MDT

amantha

Sam Smith 18May2023 06:56:00 AM MDT



APPROVED BY / DATE

Definitions

ND = None Detected (defined by dynamic range of the method) Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range ppb = Parts Per Billion

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.





Batch ID or Lot Number:	Test:	Reported:	USDA License:
230605A	Mycotoxins	17May2023	N/A
Matrix:	Test ID:	Started:	Sampler ID:
Concentrate	T000243638	16May2023	N/A
	Method(s):	Received:	Status:
	TM18 (UHPLC-QQQ LCMS/MS):	09May2023	Active
	Mycotoxins		
Mycotoxins	<b>Dynamic Range</b> (ppb)	<b>Result</b> (ppb)	Notes
Ochratoxin A	hratoxin A 3.91 - 132.37		N/A
Aflatoxin B1	0.98 - 33.60	ND	
Aflatoxin B2	0.98 - 33.86	ND	
Aflatoxin G1 1.04 - 33.44		ND	
Aflatoxin G2 1.08 - 34.19		ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

## **Final Approval**

PREPARED BY / DATE

Samanthe Sm

Sam Smith 17May2023 09:54:00 AM MDT

APPROVED BY / DATE

Karen Winternheimer 17May2023 09:56:00 AM MDT



https://results.botanacor.com/api/v1/coas/uuid/a51449ef-fec4-4db2-a5bc-0c2c82b634c1

Definitions

ND = None Detected (defined by dynamic range of the method) Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range

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Batch ID or Lot Number:	Test:	Reported:	USDA License:
230506A	<b>Residual Solvents</b>	12May2023	N/A
Matrix:	Test ID:	Started:	Sampler ID:
Concentrate	T000243637	12May2023	N/A
	Method(s):	Received:	Status:
	TM04 (GC-MS): Residual Solvents	09May2023	Active

<b>Residual Solvents</b>	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	88 - 1759	ND	
Butanes (Isobutane, n-Butane)	181 - 3611	ND	
Methanol	53 - 1066	ND	
Pentane	89 - 1777	ND	
Ethanol	88 - 1751	ND	
Acetone	88 - 1767	ND	
lsopropyl Alcohol	90 - 1796	ND	
Hexane	5 - 107	ND	
Ethyl Acetate	90 - 1801	ND	
Benzene	0.2 - 3.8	ND	
Heptanes	95 - 1899	ND	
Toluene	16 - 322	ND	
Xylenes (m,p,o-Xylenes)	118 - 2356	ND	

## **Final Approval**

PREPARED BY / DATE

Karen Winternheimer 12May2023 01:23:00 PM MDT

amantha Si

APPROVED BY / DATE

Sam Smith 12May2023 01:25:00 PM MDT



https://results.botanacor.com/api/v1/coas/uuid/87a808e2-61f5-46f9-9fd5-43499bc06358

Definitions

ND = None Detected (defined by dynamic range of the method) Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range

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Batch ID or Lot Number:	Test:	Reported:	USDA License:
230605A	<b>Heavy Metals</b>	<b>16May2023</b>	NA
Matrix:	Test ID:	Started:	Sampler ID:
Unit Co	T000243636	15May2023	NA
	Method(s):	Received:	Status:
	TM19 (ICP-MS): Heavy Metals	09May2023	NA

Heavy Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.05 - 4.78	ND	
Cadmium	0.05 - 4.90	ND	
Mercury	0.05 - 4.85	ND	
Lead	0.01 - 1.44	ND	

## **Final Approval**

PREPARED BY / DATE

Samantha Sma

Sam Smith 16May2023 09:21:00 AM MDT

APPROVED BY / DATE

Karen Winternheimer 16May2023 09:26:00 AM MDT



https://results.botanacor.com/api/v1/coas/uuid/1694cba9-a55b-456a-8b30-c02ab9c61591

**Definitions** ND = None Detected (defined by dynamic range of the method) Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range

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Batch ID or Lot Number: 230605A	Test: <b>Microbial Conta</b>	aminants	Reported: <b>09Jun2023</b>		USDA License: N/A
Matrix:	Test ID:		Started:		Sampler ID:
Finished Product	T000245797		06Jun2023		N/A
	Method(s):		Received:		Status:
	TM25 (qPCR) TM (Culture Plating) Panel)	24, TM26, TM27 : Microbial (Colorado	06Jun2023 o		Active
Microbial			<b>o</b>		
Contaminants	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	Free from visual mold, mildew, and
Salmonella	TM25: PCR	10 <sup>0</sup> CFU/25g	NA	Absent	— foreign matter
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**

Brianne Maillot

Brianne Maillot 09Jun2023 01:50:00 PM MDT

Eden Thompson

Eden Thompson-Wright 09Jun2023 02:44:00 PM MDT



PREPARED BY / DATE

https://results.botanacor.com/api/v1/coas/uuid/5f64925c-ec41-4e58-891d-16aed7a79e9c

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:  $10^2 = 100 \text{ CFU}$ ,  $10^3 = 1,000 \text{ CFU}$ ,  $10^4 = 10,000 \text{ CFU}$ ,  $10^5 = 100,000 \text{ CFU}$ CFU/g = Colony Forming Units per Gram, LOD = Limit of Detection

APPROVED BY / DATE

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.

