



JOY ORGANICS

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Joy Organics CBD Softgels with Melatonin
PRODUCT STRENGTH: 25 mg CBD / 3 mg Melatonin / 3mg CBN
LOT NUMBER: 21084A
BEST BY DATE: 09/01/2022
SOFTGEL LOT NUMBER*: **21174**

Click on the links to view third-party reports

Physical Attributes

Test	Method	Specification	Results
Color	SOP-100	Golden to Amber	PASS
Odor	SOP-100	N/A	PASS
Appearance	SOP-100	Dry, ovoid softgel capsules in container with lid and shrinkband	PASS
Primary Package Eval.	SOP-132	Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval.	SOP-132	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	SOP-111	23.75-31.25 mg CBD LOQ**: 10 PPM† (0.001%)	25.1 mg	PASS
Potency - D9-THC	SOP-111	None Detected LOQ: 10 PPM (0.001%)	ND	PASS
Compliant Pesticide Panel	SOP-111	WIP-10008 : Product Specification for Softgels, Oregon Action Limits apply	ND	PASS
Microbial - Stec E.Coli	SOP-111	Complies with USP 61/62	BELOW LOD	PASS
Microbial - Salmonella	SOP-111	Complies with USP 61/62	BELOW LOD	PASS
Microbial - Yeast/Mold	SOP-111	Complies with USP 61/62	BELOW LOD	PASS
CA Compliant Heavy Metal Panel	SOP-111	Arsenic (As): ≤1.5 PPM Cadmium (Cd): ≤0.5 PPM Mercury (Hg): ≤1.0 PPM Lead (Pb): ≤0.5 PPM	ND	PASS

**Level of Quantitation, † Parts Per Million

Quality Certified

Kei Horikawa

03/30/2021

Kei Horikawa

Date

Quality Control Manager



total cannabinoids
29 mg
 per
capsule

Δ9-THC 0.00 mg
 CBD 25.0 mg

THCa 0.00 mg
 CBDa 0.16 mg

total THC 0.00 mg
 total CBD 25.1 mg

21174

This Product
 Has Been
 Tested and
 Complies with
 7USC1639o(1)
 Definition of
 Hemp



ISO/IEC 17025:2017



Certificate #4961.01

Stillwater
 Laboratories

https://portal.a2la.org/scopepdf/4961-01.pdf

Sample Handling

test ID sample wt 46.6 g
 type capsule order 10196
 lab ID 1CU54 sample date 3/23/2021
 unit capsule unit weight 0.6 g

Methods

method	equipment
weights	MSP-7.3.1.3 AUX120.1
potency	MSP-7.5.1.5 LC-2030
terpenes	MSP-7.5.1.7 QP2020/HS20
pesticides	MSP-7.5.1.8 LC-8060
mycotoxins	MSP-7.5.1.8 LC-8060
microbial	MSP-7.5.1.1 AriaMx/Hardy
solvents	MSP-7.5.1.6 QP2020/HS20
metals	MSP-7.5.1.1 ICPMS2030

caryophyllene
 humulene
 terpinolene
 ocimene
 beta pinene
 alpha pinene
 limonene
 myrcene
 linalool

HERBAL



FLORAL

capsule



Potency

per capsule	estimated error	Terpenes	%	estimated error	%	estimated error	%	estimated error
tetrahydrocannabinolic acid (THCa) 0% 0.00 mg ± 0.01 mg	β-myrcene 0.000% ± 0.0016%	camphene 0.000% ± 0.0016%	guaiol 0.000% ± 0.0016%					
Δ ⁹ -tetrahydrocannabinol (Δ ⁹ THC) 0% 0.00 mg ± 0.01 mg	β-caryophyllene 0.000% ± 0.0016%	Δ ³ -carene 0.000% ± 0.0016%	β-bisabolol 0.000% ± 0.0016%					
Δ ⁸ -tetrahydrocannabinol (Δ ⁸ THC) 0% 0.00 mg ± 0.01 mg	alpha-pinene 0.000% ± 0.0016%	a-terpinene 0.000% ± 0.0016%	eucalyptol 0.000% ± 0.0016%					
tetrahydrocannabivarin (THCv) 0% 0.00 mg ± 0.01 mg	β-pinene 0.000% ± 0.0016%	para-cymene 0.000% ± 0.0016%						
cannabidiolic acid (CBDa) .03% 0.16 mg ± 0.02 mg	D-limonene 0.000% ± 0.0016%	g-terpinene 0.000% ± 0.0016%						
cannabidiol (CBD) 3.85% 25.0 mg ± 0.16 mg	linalool 0.000% ± 0.0016%	(-)-isopulegol 0.000% ± 0.0016%	total terpenes 0.00%					
cannabidivarin (CBDv) .02% 0.12 mg ± 0.02 mg	ocimene 0.000% ± 0.0033%	geraniol 0.000% ± 0.0016%						
cannabigerolic acid (CBGa) 0% 0.00 mg ± 0.01 mg	terpinolene 0.000% ± 0.0016%	cis-nerolidol 0.000% ± 0.0016%						
cannabigerol (CBG) .1% 0.64 mg ± 0.03 mg	alpha-humulene 0.000% ± 0.0016%	trans-nerolidol 0.000% ± 0.0016%						
cannabinol (CBN) .48% 3.13 mg ± 0.06 mg								
cannabichromene (CBC) .01% 0.04 mg ± 0.01 mg								

Solvents

MT limit	1CU54	LOQ
propane	5,000	0 ppm <10ppm
butanes	5,000	0 ppm <10ppm
pentanes	5,000	0 ppm <10ppm
hexanes	290	0 ppm <10ppm
cyclohexane	3,880	0 ppm <10ppm
heptanes	5,000	0 ppm <10ppm
methanol	3,000	0 ppm <10ppm
isopropanol	5,000	0 ppm <10ppm
acetone	5,000	0 ppm <10ppm
ethyl acetate	5,000	0 ppm <10ppm
benzene	2	0 ppm <0.2ppm
toluene	890	0 ppm <10ppm
xylenes	2,170	0 ppm <10ppm
chloroform	2	0 ppm <0.2ppm
dichloromethane	600	0 ppm <10ppm
acetonitrile	NA	0 ppm <10ppm
ethanol	NA	0 ppm <10ppm
tetrahydrofuran	NA	0 ppm <10ppm

Pesticides (MT)

MT limit	1CU54	LOQ
abamectin	0.00 ppm	<10ppb
acequinocyl	0.00 ppm	<10ppb
bifenazate	0.00 ppm	<10ppb
bifenthrin	0.00 ppm	<10ppb
chloromequat cl.	0.00 ppm	<10ppb
cyfluthrin	0.00 ppm	<80ppb
diaminozide	0.00 ppm	<10ppb
etoxazole	0.00 ppm	<10ppb
fenoxycarb	0.00 ppm	<10ppb
imazalil	0.00 ppm	<10ppb
imidacloprid	0.00 ppm	<10ppb
myclobutanil	0.00 ppm	<10ppb
paclobutrazol	0.00 ppm	<10ppb
pyrethrins	0.00 ppm	<10ppb
spinosad	0.00 ppm	<10ppb
spiromesifen	0.00 ppm	<10ppb
spirotetramat	0.00 ppm	<10ppb
trifloxystrobin	0.00 ppm	<10ppb

Pesticides (other)

1CU54	LOQ
acephate	0.00 ppm <10ppb
acetamidiprid	0.00 ppm <10ppb
aldicarb	0.00 ppm <10ppb
azoxystrobin	0.00 ppm <10ppb
boscalid	0.00 ppm <10ppb
carbaryl	0.00 ppm <10ppb
carbofuran	0.00 ppm <10ppb
chlorantraniliprole	0.00 ppm <10ppb
chlorpyrifos	0.00 ppm <10ppb
clofentezine	0.00 ppm <10ppb
cypermethrin	0.00 ppm <10ppb
diazinon	0.00 ppm <10ppb
dichlorvos	0.00 ppm <10ppb
dimethoate	0.00 ppm <10ppb
etofenprox	0.00 ppm <10ppb
fenpyroximate	0.00 ppm <10ppb
fipronil	0.00 ppm <10ppb
flonicamid	0.00 ppm <10ppb
fludioxonil	0.00 ppm <10ppb
hexythiazox	0.00 ppm <10ppb
kresoxym-methyl	0.00 ppm <10ppb
malathion	0.00 ppm <10ppb
metalaxyl	0.00 ppm <10ppb
methiocarb	0.00 ppm <10ppb
methomyl	0.00 ppm <10ppb
oxamyl	0.00 ppm <10ppb
permethrins	0.00 ppm <10ppb
phosmet	0.00 ppm <10ppb
piperonyl butoxide	0.00 ppm <10ppb
prallethrin	0.00 ppm <10ppb
propiconazole	0.00 ppm <10ppb
pyridaben	0.00 ppm <10ppb
spiroxamine	0.00 ppm <10ppb
tebuconazole	0.00 ppm <10ppb
thiacloprid	0.00 ppm <10ppb
thiamethoxam	0.00 ppm <10ppb

Toxic Metals

MT limit	1CU54	LOQ
arsenic	2 ppm	0.0 ppm <10ppb
cadmium	4.1 ppm	0.0 ppm <10ppb
lead	1.2 ppm	0.0 ppm <10ppb
mercury	0.4 ppm	0.0 ppm <10ppb

Microbial

MT limit	1CU54	LOQ
E. coli	10 CFU	0 CFU <10 CFU/g
Salmonella sp.	10 CFU	0 CFU <10 CFU/g
molds	10000 CFU	0 CFU <10k CFU/g
Aflatoxin B1,B2,G1,G2	20 ppb	0 ppb <20 ppb
Ochratoxin A	20 ppb	0 ppb <20 ppb

Comments

• All testing was completed onsite at 6073 US93N, Olney MT • Potency (cannabinoid concentration) is calculated from the equation: [cannabinoid] = [cannabinoid]_{HPLC} × volume_{dilution} / m_{dry}. Terpene concentration is calculated from the equation: [terpene] = (terpene mass)_{GCMS} / m_{dry}. ••• Decarboxyted cannabinoid concentration is calculated from the equation XXX_{total} = 0.877 × XXX_a + XXX ••• Standards are used to calibrate the resulting data and estimate error using a standard estimate of error method; this is combined with error from weighing and dilution using the propagation of error formula s_g² = Σ(∂f/∂i)²s_i² where i is the contributor to error. The 95% confidence range is calculated from the equation: (concentration) ± t_{CL90} × s_g. Sampling error is not

Certified by:

Kyle Larson, MSc (Biology)
 Deputy Director
 6073 US93N, Olney MT 59927
 406-881-2019 rdb@stlwlabs.com



1309 Record Crossing Rd
Dallas, TX 75235

Analytical Report

Report Date: 03/24/2021

Work Order: CHSG210322-047
Received Date: 03/22/2021
P.O. #:

Comments:

Sample Num: 21CH02870

Lot Number: 21174

Client Sample Num: Nano BS 25mg Sleep

Comments:

<u>Analysis</u>	<u>Method Reference</u>	<u>Result</u>	<u>Unit</u>	<u>Analysis Date</u>	<u>Approval Date</u>
Melatonin	USP Assay Melatonin	3.19	mg/svg	03/24/2021	03/24/2021

Reviewed by:

Cheri Turman, PhD., Vice President



ISO/IEC 17025:2017



Certificate #4961.01



Stillwater Laboratories

Lot# 21084A

https://portal.a2la.org/scopepdf/4961-01.pdf

Sample Handling

test ID 10245.2 sample date 3/26/21 4:26 PM
 order 10245 labID 1CX25 weight
 source

Methods

	method	equipment
weights	MSP-7.3.1.3	AUX120.1
potency	MSP-7.5.1.5	LC-2030
terpenes	MSP-7.5.1.7	QP2020/HS20
pesticides	MSP-7.5.1.8	LC-8060
mycotoxins	MSP-7.5.1.8	LC-8060
microbial	MSP-7.5.1.1	AriaMx/Hardy
solvents	MSP-7.5.1.6	QP2020/HS20
metals	MSP-7.5.1.11	ICPMS2030

gelcap



Potency % estimated error Terpenes % estimated error % estimated error % estimated error

potency not tested

terpenes not tested / not required

Solvents	MT limit	1CX25	LOQ	Pesticides (MT)	MT limit	1CX25	LOQ	Pesticides (other)	1CX25	LOQ
				abamectin	0.00 ppm	<10ppb		acephate	0.00 ppm	<10ppb
				acequinocyl	0.00 ppm	<10ppb		acetamiprid	0.00 ppm	<10ppb
				bifenazate	0.00 ppm	<10ppb		aldicarb	0.00 ppm	<10ppb
				bifenthrin	0.00 ppm	<10ppb		azoxystrobin	0.00 ppm	<10ppb
				chloromequat cl.	0.00 ppm	<10ppb		boscalid	0.00 ppm	<10ppb
				cyfluthrin	0.00 ppm	<80ppb		carbaryl	0.00 ppm	<10ppb
				diaminozide	0.00 ppm	<10ppb		carbofuran	0.00 ppm	<10ppb
				etoxazole	0.00 ppm	<10ppb		chlorantraniliprole	0.00 ppm	<10ppb
				fenoxycarb	0.00 ppm	<10ppb		chlorpyrifos	0.00 ppm	<10ppb
				imazalil	0.00 ppm	<10ppb		clofentezine	0.00 ppm	<10ppb
				imidacloprid	0.00 ppm	<10ppb		cypermethrin	0.00 ppm	<10ppb
				myclobutanil	0.00 ppm	<10ppb		diazinon	0.00 ppm	<10ppb
				paclobutrazol	0.00 ppm	<10ppb		dichlorvos	0.00 ppm	<10ppb
				pyrethrins	0.00 ppm	<10ppb		dimethoate	0.00 ppm	<10ppb
				spinosad	0.00 ppm	<10ppb		etofenprox	0.00 ppm	<10ppb
				spiromesifen	0.00 ppm	<10ppb		fenpyroximate	0.00 ppm	<10ppb
				spirotetramat	0.00 ppm	<10ppb		fipronil	0.00 ppm	<10ppb
				trifloxystrobin	0.00 ppm	<10ppb		flonicamid	0.00 ppm	<10ppb

Toxic Metals MT limit 1CX25 LOQ

metals not tested / not required

Microbial MT limit 1CX25 LOQ

<i>E. coli</i>	10 CFU	0 CFU	<10 CFU/g
Salmonella sp.	10 CFU	0 CFU	<10 CFU/g
molds	10000 CFU	0 CFU	<10k CFU/g
Aflatoxin B1,B2,G1,G2	20 ppb	0 ppb	<20 ppb
Ochratoxin A	20 ppb	0 ppb	<20 ppb

Comments

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