

# CERTIFICATE OF ANALYSIS

**PRODUCT NAME:** CBD Softgels with Melatonin  
**PRODUCT STRENGTH:** 25 mg CBD / 1 mg Melatonin  
**LOT NUMBER:** 20336A  
**BEST BY DATE:** 04/29/2022  
**SOFTGEL LOT NUMBER:** ND2520-01

**\*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
<b>Potency - Total CBD</b>	SOP-111	23.75-31.25 mg CBD LOQ** : 10 PPM† (0.001%)	<b>28.8 mg</b>	PASS
<b>Potency - D9-THC</b>	SOP-111	None Detected LOQ: 10 PPM (0.001%)	ND	PASS
<b>Compliant Pesticide Panel</b>	SOP-111	WIP-10008 : Product Specification for Softgels, Oregon Action Limits apply	ND	PASS
<b>Microbial - Stec E.Coli</b>	SOP-111	Complies with USP 61/62	BELOW LOD	PASS
<b>Microbial - Salmonella</b>	SOP-111	Complies with USP 61/62	BELOW LOD	PASS
<b>Microbial - Yeast/Mold</b>	SOP-111	Complies with USP 61/62	BELOW LOD	PASS
<b>CA Compliant Heavy Metal Panel</b>	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 by:

*Kei Horikawa*

12/11/2020

Kei Horikawa

Date

Quality Control Manager



total cannabinoids	$\Delta^9$ -THC	THCa	total THC
<b>29 mg</b>	0.00 mg	0.00 mg	0.00 mg
per	CBD	CBDa	total CBD
<b>capsule</b>	28.8 mg	0.00 mg	28.8 mg

Lot# 20336A

This Product Has Been Tested and Complies with 7USC1639c(1) Definition of Hemp



Stillwater Laboratories

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

Sample Handling

test ID	sample wt	19.0 g
type	order	9177
lab ID	sample date	12/10/2020
unit	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

gelcap



Potency	per capsule	estimated error	Terpenes	%	estimated error	%	estimated error
tetrahydrocannabinolic acid (THCa)	0%	0.00 mg ± 0.01 mg	terpenes not tested / not required				
$\Delta^9$ -tetrahydrocannabinol ( $\Delta^9$ THC)	0%	0.00 mg ± 0.01 mg					
$\Delta^8$ -tetrahydrocannabinol ( $\Delta^8$ THC)	0%	0.00 mg ± 0.01 mg					
tetrahydrocannabivarin (THCv)	0%	0.00 mg ± 0.01 mg					
cannabidiolic acid (CBDa)	0%	0.00 mg ± 0.01 mg					
cannabidiol (CBD)	4.54%	28.8 mg ± 0.14 mg					
cannabidivarin (CBDv)	.08%	0.52 mg ± 0.02 mg					
cannabigerolic acid (CBGa)	0%	0.00 mg ± 0.01 mg					
cannabigerol (CBG)	0%	0.00 mg ± 0.01 mg					
cannabinol (CBN)	0%	0.00 mg ± 0.01 mg					
cannabichromene (CBC)	0%	0.00 mg ± 0.01 mg					

Solvents	MT limit	0MJ34	LOQ	Pesticides (MT)	MT limit	0MJ34	LOQ	Pesticides (other)	0MJ34	LOQ
propane	5,000	0 ppm	<10ppm	abamectin	0.00 ppm	<10ppb		acephate	0.00 ppm	<10ppb
butanes	5,000	0 ppm	<10ppm	acequinocyl	0.00 ppm	<10ppb		acetamidrid	0.00 ppm	<10ppb
pentanes	5,000	0 ppm	<10ppm	bifenazate	0.00 ppm	<10ppb		aldicarb	0.00 ppm	<10ppb
hexanes	290	0 ppm	<10ppm	bifenthrin	0.00 ppm	<10ppb		azoxystrobin	0.00 ppm	<10ppb
cyclohexane	3,880	0 ppm	<10ppm	chlormequat cl.	0.00 ppm	<10ppb		boscalid	0.00 ppm	<10ppb
heptanes	5,000	0 ppm	<10ppm	cyfluthrin	0.00 ppm	<80ppb		carbaryl	0.00 ppm	<10ppb
methanol	3,000	0 ppm	<10ppm	diaminozide	0.00 ppm	<10ppb		carbofuran	0.00 ppm	<10ppb
isopropanol	5,000	0 ppm	<10ppm	etoxazole	0.00 ppm	<10ppb		chloantranilprole	0.00 ppm	<10ppb
acetone	5,000	0 ppm	<10ppm	fenoxycarb	0.00 ppm	<10ppb		chlorpyrifos	0.00 ppm	<10ppb
ethyl acetate	5,000	0 ppm	<10ppm	imazalil	0.00 ppm	<10ppb		clofentezine	0.00 ppm	<10ppb
benzene	2	0 ppm	<0.2ppm	imidacloprid	0.00 ppm	<10ppb		cypermethrin	0.00 ppm	<10ppb
toluene	890	0 ppm	<10ppm	myclobutanil	0.00 ppm	<10ppb		diazinon	0.00 ppm	<10ppb
xylene	2,170	0 ppm	<10ppm	paclobutrazol	0.00 ppm	<10ppb		dichlorvos	0.00 ppm	<10ppb
chloroform	2	0 ppm	<0.2ppm	pyrethrins	0.00 ppm	<10ppb		dimethoate	0.00 ppm	<10ppb
dichloromethane	600	0 ppm	<10ppm	spinosad	0.00 ppm	<10ppb		etofenprox	0.00 ppm	<10ppb
acetonitrile	NA	0 ppm	<10ppm	spiromesifen	0.00 ppm	<10ppb		fenpyroximate	0.00 ppm	<10ppb
ethanol	NA	0 ppm	<10ppm	spirotetramat	0.00 ppm	<10ppb		fipronil	0.00 ppm	<10ppb
tetrahydrofuran	NA	0 ppm	<10ppm	trifloxystrobin	0.00 ppm	<10ppb		flonicamid	0.00 ppm	<10ppb

Toxic Metals	MT limit	0MJ34	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	0MJ34	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

• All testing was completed onsite at 6073 US93N, Olney MT \*\* Potency (cannabinoid concentration) is calculated from the equation: [cannabinoid] = [cannabinoid]<sub>HPLC</sub> x volume<sub>dilution</sub> / m<sub>dry</sub>. Terpene concentration is calculated from the equation: [terpene] = (terpene mass)<sub>GCMS</sub> / m<sub>dry</sub>. \*\*\* Decarboxyated cannabinoid concentration is calculated from the equation XXX<sub>total</sub> = 0.877 x XXX<sub>a</sub> + 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<sub>p</sub><sup>2</sup> = Σ(∂f/∂i)<sup>2</sup>s<sub>i</sub><sup>2</sup> where i is the contributor to error. The 95% confidence range is calculated from the equation: (concentration) ± t<sub>CL90</sub> x s<sub>p</sub>. Sampling error is not

Certified by:

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Deputy Director  
6073 US93N, Olney MT 59927  
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acetamiprid	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
chloantranilprole	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

**CONFIDENTIAL EXTRACTOR**

**PRODUCT NAME:** CBD Soft Gels No Dye Melatonin, 25mg CBD /1mg Melatonin

**PRODUCT CODE:** GCNDMEL-X-Y-A

**LOT NUMBER:** GC/Mel/Cham/ND 2520-01

**DATE OF MANUFACTURE:** 29OCT2020 **EXPIRATION DATE:** 29APR2022

(DDMMYYYY)

(Expiration date is 18 months under sealed conditions.)

**INGREDIENTS:**

**Composition of Fill:** Polysorbate 80, Polysorbate 20, Fractionated Coconut Oil, Broad Spectrum CBD Oil (0.0% THC), β-Caryophyllene, Melatonin, Roman Chamomile Oil.

**Composition of the Shell:** Bovine-derived Gelatin, Glycerin, Water

Parameter	Method <sup>1</sup>	Specification	Results
Appearance	QCU002	Oval soft gelatin capsule	Pass
Color		Light Translucent Yellow	Pass
Average Weight (N=10)		For Information Only	635.7 mg
<b>Cannabinoids</b>		<b>LOQ (ppm)</b>	<b>Wt. (%)</b>
CBD		20	4.437
CBD-A		20	< LOQ
Δ9-THC		5	< LOQ
THC-A		5	< LOQ
CBN		5	< LOQ
CBN-A		5	< LOQ
CBG	QCU001	5	< LOQ
CBC	(UHPLC-DAD)	5	< LOQ
CBC-A		5	< LOQ
Δ8-THC		5	< LOQ
CBDV		5	0.064
CBDV-A		5	< LOQ
THCV		5	< LOQ
Potency – Total CBD		NLT 95% of Label Claim for CBD	28.1 mg CBD/softgel 112% of Labelled Claim for CBD
Total THC		0.0%	0.0%
Identity – CBD		Retention Time ± 0.05min of Standard	0.00 min
Melatonin Content	HPLC-DAD	80 – 120% of Labelled Claim for Melatonin	0.93 mg Melatonin/softgel 93% of Labelled Claim
Terpenes <sup>2</sup>	GC/FID & LC/MS	Refer to Oil Specification	Refer to Oil Specification
Pesticides <sup>2</sup>	LC/MS & GC/MS	Refer to Oil Specification	Refer to Oil Specification
Residual Solvents <sup>2</sup>	USP <467>	Refer to Oil Specification	Refer to Oil Specification
Elemental Impurities: <sup>2</sup>	USP <2232>	Refer to Oil Specification	Refer to Oil Specification
Microbial Limits: <sup>2</sup>	USP<2032>	Refer to Oil Specification	Refer to Oil Specification

*Notes: <sup>1</sup>according to Volium Biosciences internal analytical methods, US Pharmacopeia or 3<sup>rd</sup> party contract laboratory method. <sup>2</sup>Testing performed on bulk oil. ND=Not Detected, LOQ=Limit of Quantification, LOD=Limit of Detection*

This product is not intended to diagnose, treat, cure, or prevent any disease and has not been evaluated by the FDA.