

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Joy Organics CBD Softgels with Curcumin

PRODUCT STRENGTH: 25 mg CBD / 10 mg Curcumin

FILL LOT NUMBER: 21143 SOFTGEL BATCH: 21096A

BEST BY DATE: 09/03/2022

Click on the links to view third-party reports

Physical Atttributes

Test	Method	Specification	Results
Color	SOP-100	Golden to Amber	PASS
Odor	SOP-100	N/A	PASS
Appearance	SOP-100	100 Dry, ovoid softgel capsules in container with lid and shrinkband	PASS
Primary Package Eval.	rimary 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	25-31.25 mg CBD LOQ**: 10 PPM† (0.001%)	28 mg	PASS
Potency - D9-THC	SOP-111	None Detected LOQ: 10 PPM (0.001%)	ND	PASS
Compliant Pesticide Panel	SOP-111	WIP-100008 : Product specification for softgel Oregon Action limits apply	ND	PASS
Microbial - Stec E.Coli	SOP-111	Complies with USP 61/62	Below LOQ	PASS
Microbial - Salmonella	SOP-111	Complies with USP 61/62	Below LOQ	PASS
Microbial - Yeast and Mold	SOP-111	Complies with USP 61/62	Below LOQ	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 Kei Horikawa

04/13/2021

Date

Quality Control Manager

Nano BS Curcumin 25mg

7USC1639 Certificate of Analysis

Lot# 21143

rec'd 3/5/2021 11:34:16 AM

cannabinoids

29.2mg per pill order 10005

THC tot ND CBD tot 28.0mg This Product Has Been **Tested and Complies** with 7USC1639o(1)

Stillwater Laboratories



Potency per	pill	MSP-7.5.1.4	LOD LOQ (95%CI	k=2)			erpenes		MSF	-7.5.
total ca	nnabinoids		0.15 0.46 ±0.6						total terpenes	N
	total THC‡		0.15 0.46 ±0.4			caryo	phyllene	Ā	linalool	
total THC (1			0.15 0.46 ±0.40			h	umulene	9	β-myrcene	
	total CBD‡	28.0mg	0.15 0.46 ±0.68	Bmg			uniulene	-	D-limonene	
total CBD (C	BD+CBDa)	28.0mg	0.15 0.46 ±0.68	Bmg		tei	rpinolene		α-pinene	
Englishmen beginning with							ocimene	88	β-pinene ocimene	
tetrahydrocannabolio			0.15 0.46 ±0.4				ocimene	2)1	terpinolene	
Δ9-tetrahydrocannab			0.14 0.43 ±0.4			bet	a pinene	63	α-humulene	i
Δ8-tetrahydrocannab	nol (Δ8 THC)		0.19 0.58 ±0.5	8mg		n l n l n		485	β-caryophyllene	i
tetrahydrocannab	ivarin (THCv)	ND	0.16 0.48 ±0.4	l8mg		aipn	a pinene	^	α-bisabolol	
cannabidiolic	acid (CBDa)	<loq< td=""><td>0.13 0.40 ±0.4</td><td>l0mg</td><td></td><td></td><td>imonene</td><td>(D)</td><td>camphene</td><td></td></loq<>	0.13 0.40 ±0.4	l0mg			imonene	(D)	camphene	
cann	abidiol (CBD)	27.8mg	0.15 0.46 ±0.6	88ma			Paul Die Bernanne	ress	Δ3-carene	
	varin (CBDv)	NĎ	0.15 0.46 ±0.4				myrcene	60	caryophyllene oxide	
cannabigerolic		ND	0.14 0.41 ±0.4				linalool	8	para-cymene	
	igerol (CBG)	0.7mg	0.04 0.13 ±0.1					ω	eucalyptol	
	abinol (CBN)	ND	0.08 0.25 ±0.2						geraniol	
	mene (CBC)	<loq< td=""><td>0.15 0.46 ±0.4</td><td></td><td></td><td></td><td></td><td></td><td>guaiol</td><td></td></loq<>	0.15 0.46 ±0.4						guaiol	
1icrobial	MSP-7.5.1.10	limit	LOD LOQ error	rocult		Pesticides	MPD 7 5 1 0	limit	100 100	
E.coli	ND ND	0CFU	0.0 0.1 ±0.1 CFU	result	= = :	Abamectin	MSP-7.5.1.8 ND	limit 0.30 ppm	LOD LOQ error 0.007 0.022 ±0.022 ppm	re. P
Salmonella sp.	ND	0CFU	0.0 0.1 ±0.1CFU	PASS		Acephate	ND	5.00 ppm	0.007 0.022 ±0.022 ppm	P
molds		10000CFU	1.7 5.0 ±5.0CFU	PASS		Acequinocyl	ND	4.00 ppm	0.008 0.023 ±0.023 ppm	P
Ochratoxin A	ND	20 ppb	0.4 1.3 ±1.3 ppb	PASS		Acetamiprid	ND	5.00 ppm	0.005 0.016 ±0.016 ppm	P
Aflatoxin B1B2G1G2	ND	20 ppb	0.4 1.3 ±1.3 ppb	PASS		Aldicarb	ND	0.00 ppm	0.002 0.006 ±0.006 ppm	P
		To bbo	о. ч т. о т д т. о рро	11.00	DATE	Azoxystrobin	ND	40.00 ppm	0.002 0.006 ±0.006 ppm	P
olvents	MSP-7.5.1,7	limit	LOD LOQ error	result	A	Bifenazate	ND	5.00 ppm	0.002 I 0.005 I ±0.005 ppm	P
						Bifenthrin	ND	0.50 ppm	0.001 I 0.003 I ±0.003 ppm	P
Acetone Acetonitrile	ND	5000 ppm	0.6 1.8 ±1.8 ppm	PASS	ISSUE	Boscalid	ND	10.00 ppm	0.021 I 0.064 I ±0.064 ppm	P
Benzene	ND ND	410 ppm	0.5 1.6 ±1.6 ppm	PASS PASS	SS	Carbaryl	ND	0.50 ppm	0.008 0.025 ±0.025 ppm	P
Butane	ND	0 ppm 5000 ppm	0.0 0.1 ±0.1 ppm 1.3 3.8 ±3.8 ppm	PASS	3	Carbofuran	ND	0.00 ppm	0.002 0.005 ±0.005 ppm	P
Chloroform	ND	0 ppm	0.1 0.2 ±0.2 ppm	PASS	AND	Chloantraniliprole	ND	40.00 ppm	0.020 0.061 ±0.061 ppm	P
Cyclohexane	ND	0 ppm	0.5 1.4 ±1.4 ppm	PASS	A	Chlorfenapyr Chlorpyrifos	ND ND	0.00 ppm 0.00 ppm	0.005 0.016 ±0.016 ppm 0.042 0.127 ±0.127 ppm	P.
Ethanol		10000 ppm	0.6 1.9 ±2.1 ppm	PASS	Ω	Clofentezine	ND ND	0.50 ppm	0.008 I 0.023 I ±0.023 ppm	P
Heptane	ND	5000 ppm	0.4 1.1 ±1.1 ppm	PASS	ш	Coumaphos	ND	0.00 ppm	0.005 0.016 ±0.016 ppm	P
Hexane	ND	290 ppm	0.5 1.4 ±1.4 ppm	PASS	1	Cyfluthrin	ND	1.00 ppm	0.008 0.023 ±0.023 ppm	P
Isopropyl alcohol	ND	5000 ppm	0.6 1.7 ±1.7 ppm	PASS	Ö	Cypermethrin	ND	1.00 ppm	0.005 0.016 ±0.016 ppm	P
Methanol	ND	3000 ppm	0.5 1.4 ±1.4 ppm	PASS	ഥ	Daminozide	ND	0.00 ppm	0.029 I 0.086 I ±0.086 ppm	P
Pentane	ND	5000 ppm	0.2 I 0.5 I ±0.5 ppm	PASS	-	Dichlorvos	ND	0.00 ppm	0.015 0.044 ±0.044 ppm	P
Propane	ND	5000 ppm	0.5 1.4 ±1.4 ppm	PASS	岀	Diazinon	ND	0.20 ppm	0.001 0.004 ±0.004 ppm	P
Toluene	ND	890 ppm	0.3 0.8 ±0.8 ppm	PASS	O	Dimethoate	ND	0.00 ppm	0.002 I 0.006 I ±0.006 ppm	P
Xylenes	ND	2170 ppm	0.3 I 0.9 I ±0.9 ppm	PASS	픙	Etoxazole	ND	1.50 ppm	0.004 0.012 ±0.012 ppm	P
					Ĕ	Fenoxycarb	ND	0.00 ppm	0.004 0.011 ±0.011 ppm	P
					₹	Fenpyroximate	ND	2.00 ppm	0.001 I 0.004 I ±0.004 ppm	P
					F	Fipronil	ND	0.00 ppm	0.008 0.023 ±0.023 ppm	P
/letals					S	Flonicamid Fludioxonil	ND	2.00 ppm	0.102 0.307 ±0.307 ppm	P
riciais	MSP-7.5.1.11	limit	LOD LOQ error	result	Σ	Hexythiazox	ND ND	30.00 ppm 2.00 ppm	0.007 0.020 ±0.020 ppm 0.001 0.003 ±0.003 ppm	P
Arsenic	ND	1500 ppb	2.5 7.5 ±7.5 ppb	PASS	云	Imazalil	ND	0.00 ppm	0.007 0.003 ±0.003 ppm	P
Cadmium	ND	500 ppb	2.7 8.0 ±8.0 ppb	PASS	A H	Imidacloprid	ND	3.00 ppm	0.001 0.004 ±0.004 ppm	P
Lead	ND	500 ppb	4.2 12.5 ±12.5 ppb	PASS	È	Malathion	ND	5.00 ppm	0.005 0.016 ±0.016 ppm	P
Mercury	ND	300 ppb	2.1 6.3 ±6.3 ppb	PASS	111	Metalaxyl	ND	15.00 ppm	0.008 0.024 ±0.024 ppm	P
					WATERMARK MUST MATCH CERTIFICATE ID	Methiocarb	ND	0.00 ppm	0.004 0.011 ±0.011 ppm	P
Pesticides	MSP-7.5.1.8	limit	LOD LOQ error	result	٧	Methomyl	ND	0.10 ppm	0.001 I 0.002 I ±0.002 ppm	P
Dissethale	NID	. 00	0.000 0.000 0.000	DAGG		Methyl parathion	ND	0.00 ppm	0.001 I 0.003 I ±0.003 ppm	P
Pyrethrin			0.003 0.008 ±0.008 ppm	PASS	FEATURE:	Mevinphos	ND	0.00 ppm	0.005 0.016 ±0.016 ppm	P
Pyridaben Spinetoram			0.001 0.003 ±0.003 ppm	PASS	≒	Myclobutanil	ND	9.00 ppm	0.001 I 0.003 I ±0.003 ppm	P
Spinetoram Spinosad			0.004 0.011 ±0.011 ppm 0.007 0.020 ±0.020 ppm	PASS	F	Naled	ND	0.50 ppm	0.005 0.016 ±0.016 ppm	P
Spirosad			0.003 0.009 ±0.009 ppm	PASS	崱	Oxamyl	ND	0.20 ppm	0.002 0.007 ±0.007 ppm	P
Spirotetramat			0.003 0.009 ±0.009 ppm 0.002 0.007 ±0.007 ppm	PASS	_ _	Paclobutrazol	ND	0.00 ppm	0.003 0.009 ±0.009 ppm	P
Spiroxamine			0.001 I 0.003 I ±0.003 ppm	PASS	É	Permethrin	ND	20.00 ppm	0.010 0.031 ±0.031 ppm	P
Tebuconazole			0.005 0.016 ±0.016 ppm	PASS	SECURITY	Phosmet	ND ND	0.20 ppm	0.003 0.009 ±0.009 ppm	P.
			0.001 I 0.003 I ±0.003 ppm	PASS	5	Piperonylbutoxide Prallethrin	ND ND	8.00 ppm	0.011 0.032 ±0.032 ppm	P
Thiacloprid					-	rraneunin	ND	0.40 ppm	0.004 0.012 ±0.012 ppm	P
Thiamethoxam		1.50 ppm	0.003 0.009 ±0.009 ppm	PASS	ш	Propiconazole	ND	20.00 ppm	0.004 0.012 ±0.012 ppm	PA

Certified by:

Kyle Larson, MSc

Deputy Director

QA Manager

Jacob Harris

ACCREDITED Certificate #4961.01

ISO/IEC 17025:2017

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

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INSTRUMENTS: Potency by HPLC (LC2030C-UV), solvents and terpenes by GCMS (QP2020/HS20), pesticides and mycotoxins by LCMSMS (LC8060), microbial by qPCR (AriaMx) and plating (Hardy Diagnostics), metals by ICPMS (ICPMS-2030)

- All testing was completed onsite at 6073 US93N, Olney MT -- Potency (cannabinoid concentration) is calculated as: [cannabioid] = [cannabinoid]_{HPLC} x volume_station/ml_{dry} -- ... Decarboxyted cannabinoid concentration is calculated XXX_{lotal} = 0.877 x XXXa + XXX -- ... Standards are used to calibrate the resulting data and estimate error using a standard estimate of error method; LOD is the limit of detection (3.3s), LOQ is the limit of quantification (3xLOD), and experimental error is calculated from weighing, dilution, and interpolation error using the formula $\mathbf{s}_0^2 = \sum (\partial I \partial I)^2 \mathbf{s}_1^2$ where i is the contributor to error. The 95% confidence range is calculated from: (concentration) $\pm \mathbf{t}_{0.90}$ x \mathbf{s}_0 . Sampling error is not considered in error calculations. ND = not detected (< LOD), NT = not tested, NL = no limit, NA = not applicable. \ddagger = decarbed



Analytical Report

Lot Number: 21143

1309 Record Crossing Rd Dallas, TX 75235

Report Date: 03/10/2021

Work Order: CHSG210304-032

Received Date: 03/04/2021

P.O. #:

Comments:

Sample Num: 21CH02105

Client Sample Num: BS 25mg Curcumin

Comments:

<u>Analysis</u>	Method Reference	Result	Unit	Analysis Date	Approval Date
Curcuminoid- Bis-demethoxycurcumin	AOAC 2016.16	0.127	mg/svg	03/10/2021	03/10/2021
Curcuminoid- Curcumin	AOAC 2016.16	10.08	mg/svg	03/10/2021	03/10/2021
Curcuminoid- Demethoxycurcumin	AOAC 2016.16	1.15	mg/svg	03/10/2021	03/10/2021
Curcuminoid- Total Curcuminoids	AOAC 2016.16	11.36	mg/svg	03/10/2021	03/10/2021

Reviewed by:

Cheri Turman, PhD., Vice President

certificate ID

1DG23



SG25C

Lot# 21096A

rec'd 4/8/2021 12:51:59 PM

order 10374

R Certificate of Analysis

Stillwater Laboratories



Microbial	MSP-7.5.1.10	limit	LOD LOQ error	result
E.coli Salmonella sp.	ND ND	NL NL	0.1 0.2 ±0.2CFU 0.1 0.2 ±0.2CFU	NA NA
molds	ND	NL	2.9 8.8 ±8.8CFU	NA

Metals

MSP-7.5.1.11

LOD

error

WATERMARK MUST MATCH CERTIFICATE ID AND ISSUE DATE

SECURITY FEATURE:

Certified by:

Kyle Larson, MSc

Deputy Director

Jad- Paux

Jacob Harris QA Manager

ISO/IEC 17025:2017 ACCREDITED Certificate #4961.01

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

Stillwater Laboratories Inc. MT License L0001, L00007 6073 US93N Suite 5, Olney MT 59927 406-881-2019 INSTRUMENTS: Potency by HPLC (LC2030C-UV), solvents and terpenes by GCMS (QP2020/HS20), pesticides and mycotoxins by LCMSMS (LC8060), microbial by qPCR (AriaMx) and plating (Hardy Diagnostics), metals by ICPMS (ICPMS-2030)

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