



CERTIFICATE OF ANALYSIS

PRODUCT NAME: Joy Organics CBD Softgels with Curcumin
PRODUCT STRENGTH: 25 mg CBD / 10 mg Curcumin
FILL LOT NUMBER: 21211
SOFTGEL BATCH: 21147B
BEST BY DATE: 04/07/2023

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	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	25-31.25 mg CBD LOQ**: 10 PPM† (0.001%)	25.8 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


 Kayla Kolber
 Quality Assurance Technician

06/04/2021

Date

Certificate of Analysis

Product Name: Organics Softgels 25 mg with Curcumin	Product No.: 6-026-10-01
Lot No.: 21211	Country of Origin: USA
Product Packaging: Bottle	Serving Size: 1 softgel
	Manufacture Date: 04/07/2021
	Report Date: 05/04/2021

Analyte	Test Method	Acceptable Limit	Test Results
Physical			
Appearance	Visual	Transparent gel cap	Conforms
Color	Visual	Red	Conforms
Potency/Chemistry			
Total Cannabinoids	MSP-7.3.1.5	NLT 25 mg/capsule	26 mg/capsule
Total THC (delta 9 THC and THC-A)	MSP-7.3.1.5	0.1% w/w	None detected
Curcumin	AOAC 2016.16	NLT 10 mg/capsule	10 mg/capsule
Impurities			
Pesticides	MSP-7.5.1.6	Below action level limits	Conforms
Solvents	MSP-7.5.1.6	Below action level limits	Conforms
Microbiological Pathogens			
Escherichia coli	MSP-7.5.1.1	Absent/10 g	None detected
Salmonella	MSP-7.5.1.1	Absent /10 g	None detected
Yeasts & Molds	MSP-7.5.1.1	NMT 100 cfu/g	0 cfu/g
Ochratoxin A	MSP-7.5.1.1	None detected	None detected
Aflatoxins	MSP-7.5.1.1	None detected	None detected
Heavy Metals			
Arsenic	MSP-7.5.1.1	NMT 1.5 ppm	None detected
Cadmium	MSP-7.5.1.1	NMT 0.3 ppm	None detected
Lead	MSP-7.5.1.1	NMT 1.0 ppm	None detected
Mercury	MSP-7.5.1.1	NMT 0.5 ppm	None detected

Quality Control: 

Date: 05/04/2021

Quality Assurance: 

Date: 05/04/2021

certificate ID
1DU79

Nano BS 25mg

7USC1639 Certificate of Analysis

21211

rec'd 4/23/2021 12:59:58 PM

order 10562



total cannabinoids
26.3mg

per pill

THC‡ ND
CBD‡ 25.8mg

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

Stillwater Laboratories



Potency per pill	MSP-7.5.1.4	LOD	LOQ	error (95%CI k=2)
total cannabinoids	26.3mg	0.13	0.39	±0.60mg
total THC‡	ND	0.13	0.39	±0.39mg
total THC (THC+THCa)	ND	0.13	0.39	±0.39mg
total CBD‡	25.8mg	0.13	0.39	±0.60mg
total CBD (CBD+CBDA)	25.8mg	0.13	0.39	±0.60mg
tetrahydrocannabinolic acid (THCa)	ND	0.13	0.40	±0.40mg
Δ9-tetrahydrocannabinol (Δ9 THC)	ND	0.12	0.37	±0.37mg
Δ8-tetrahydrocannabinol (Δ8 THC)	ND	0.17	0.50	±0.50mg
tetrahydrocannabivarin (THCv)	ND	0.14	0.42	±0.42mg
cannabidiolic acid (CBDA)	ND	0.11	0.34	±0.34mg
cannabidiol (CBD)	25.8mg	0.13	0.39	±0.60mg
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cannabidiol (CBD)	25.8mg	0.13	0.39	±0.60mg
cannabigerolic acid (CBGA)	ND	0.12	0.35	±0.35mg
cannabigerol (CBG)	0.5mg	0.04	0.11	±0.12mg
cannabinol (CBN)	ND	0.07	0.21	±0.21mg
cannabichromene (CBC)	ND	0.13	0.39	±0.39mg

Terpenes

caryophyllene	█
humulene	
terpinolene	█
ocimene	█
beta pinene	█
alpha pinene	█
limonene	█
myrcene	█
linalool	█

total terpenes	0.386%
linalool	ND
β-myrcene	ND
D-limonene	ND
α-pinene	ND
β-pinene	ND
ocimene	ND
terpinolene	ND
α-humulene	0.021%
β-caryophyllene	0.360%
α-bisabolol	ND
camphene	ND
Δ3-carene	ND
caryophyllene oxide	ND
para-cymene	ND
eucalyptol	ND
geraniol	ND
guaial	<LOQ

Microbial	MSP-7.5.1.10	limit	LOD	LOQ	error	result
E. coli	ND	0CFU	0.1	0.2	±0.2CFU	PASS
Salmonella sp.	ND	0CFU	0.1	0.2	±0.2CFU	PASS
molds	ND	10000CFU	2.6	7.8	±7.8CFU	PASS
Ochratoxin A	ND	20 ppb	0.4	1.2	±1.2 ppb	PASS
Aflatoxin B1B2G1G2	ND	20 ppb	0.4	1.3	±1.3 ppb	PASS

Pesticides

MSP-7.5.1.8	limit	LOD	LOQ	error	result	
Abamectin	ND	0.30 ppm	0.007	0.021	±0.021 ppm	PASS
Acephate	ND	5.00 ppm	0.007	0.022	±0.022 ppm	PASS
Acequinocyl	ND	4.00 ppm	0.006	0.019	±0.019 ppm	PASS
Acetamiprid	ND	5.00 ppm	0.005	0.015	±0.015 ppm	PASS
Aldicarb	ND	0.00 ppm	0.002	0.006	±0.006 ppm	PASS
Azoxystrobin	ND	40.00 ppm	0.002	0.006	±0.006 ppm	PASS
Bifenazate	ND	5.00 ppm	0.002	0.005	±0.005 ppm	PASS
Bifenthrin	ND	0.50 ppm	0.001	0.002	±0.002 ppm	PASS
Boscalid	ND	10.00 ppm	0.020	0.061	±0.061 ppm	PASS
Carbaryl	ND	0.50 ppm	0.008	0.024	±0.024 ppm	PASS
Carbofuran	ND	0.00 ppm	0.002	0.005	±0.005 ppm	PASS
Chlorantraniliprole	ND	40.00 ppm	0.019	0.058	±0.058 ppm	PASS
Chlorfenapyr	ND	0.00 ppm	0.005	0.015	±0.015 ppm	PASS
Chlorpyrifos	ND	0.00 ppm	0.040	0.120	±0.120 ppm	PASS
Clofentezine	ND	0.50 ppm	0.007	0.022	±0.022 ppm	PASS
Coumaphos	ND	0.00 ppm	0.005	0.015	±0.015 ppm	PASS
Cyfluthrin	ND	1.00 ppm	0.007	0.022	±0.022 ppm	PASS
Cypermethrin	ND	1.00 ppm	0.005	0.015	±0.015 ppm	PASS
Daminozide	ND	0.00 ppm	0.027	0.082	±0.082 ppm	PASS
Dichlorvos	ND	0.00 ppm	0.014	0.042	±0.042 ppm	PASS
Diazinon	ND	0.20 ppm	0.001	0.003	±0.003 ppm	PASS
Dimethoate	ND	0.00 ppm	0.002	0.006	±0.006 ppm	PASS
Etoxazole	ND	1.50 ppm	0.004	0.011	±0.011 ppm	PASS
Fenoxycarb	ND	0.00 ppm	0.003	0.010	±0.010 ppm	PASS
Fenprothion	ND	2.00 ppm	0.001	0.003	±0.003 ppm	PASS
Fipronil	ND	0.00 ppm	0.007	0.022	±0.022 ppm	PASS
Fonicamid	ND	2.00 ppm	0.097	0.291	±0.291 ppm	PASS
Fludioxonil	ND	30.00 ppm	0.006	0.019	±0.019 ppm	PASS
Hexythiazox	ND	2.00 ppm	0.001	0.003	±0.003 ppm	PASS
Imazalil	ND	0.00 ppm	0.006	0.019	±0.019 ppm	PASS
Imidacloprid	ND	3.00 ppm	0.001	0.003	±0.003 ppm	PASS
Malathion	ND	5.00 ppm	0.005	0.015	±0.015 ppm	PASS
Metalaxyl	ND	15.00 ppm	0.007	0.022	±0.022 ppm	PASS
Methiocarb	ND	0.00 ppm	0.004	0.011	±0.011 ppm	PASS
Methomyl	ND	0.10 ppm	0.001	0.002	±0.002 ppm	PASS
Methyl parathion	ND	0.00 ppm	0.001	0.003	±0.003 ppm	PASS
Mevinphos	ND	0.00 ppm	0.005	0.015	±0.015 ppm	PASS
Myclobutanil	ND	9.00 ppm	0.001	0.003	±0.003 ppm	PASS
Naled	ND	0.50 ppm	0.005	0.015	±0.015 ppm	PASS
Oxamyl	ND	0.20 ppm	0.002	0.007	±0.007 ppm	PASS
Pacllobutrazol	ND	0.00 ppm	0.003	0.008	±0.008 ppm	PASS
Permethrin	ND	20.00 ppm	0.010	0.029	±0.029 ppm	PASS
Phosmet	ND	0.20 ppm	0.003	0.009	±0.009 ppm	PASS
Piperonylbutoxide	ND	8.00 ppm	0.010	0.030	±0.030 ppm	PASS
Prallethrin	ND	0.40 ppm	0.004	0.011	±0.011 ppm	PASS
Propiconazole	ND	20.00 ppm	0.004	0.011	±0.011 ppm	PASS
Propoxur	ND	0.00 ppm	0.006	0.017	±0.017 ppm	PASS

Solvents	MSP-7.5.1.7	limit	LOD	LOQ	error	result
Acetone	ND	5000 ppm	0.7	2.1	±2.1 ppm	PASS
Acetonitrile	ND	410 ppm	0.6	1.9	±1.9 ppm	PASS
Benzene	ND	0 ppm	0.0	0.1	±0.1 ppm	PASS
Butane	ND	5000 ppm	1.4	4.2	±4.2 ppm	PASS
Chloroform	ND	0 ppm	0.1	0.2	±0.2 ppm	PASS
Cyclohexane	ND	0 ppm	0.5	1.6	±1.6 ppm	PASS
Ethanol	ND	10000 ppm	0.7	2.1	±2.1 ppm	PASS
Heptane	ND	5000 ppm	0.4	1.2	±1.2 ppm	PASS
Hexane	ND	290 ppm	0.5	1.6	±1.6 ppm	PASS
Isopropyl alcohol	ND	5000 ppm	0.6	1.9	±1.9 ppm	PASS
Methanol	ND	3000 ppm	0.5	1.6	±1.6 ppm	PASS
Pentane	ND	5000 ppm	0.2	0.6	±0.6 ppm	PASS
Propane	ND	5000 ppm	0.5	1.6	±1.6 ppm	PASS
Toluene	ND	890 ppm	0.3	0.9	±0.9 ppm	PASS
Xylenes	ND	2170 ppm	0.3	1.0	±1.0 ppm	PASS

Metals	MSP-7.5.1.11	limit	LOD	LOQ	error	result
Arsenic	ND	1500 ppb	2.8	8.3	±8.3 ppb	PASS
Cadmium	ND	500 ppb	3.0	9.0	±9.0 ppb	PASS
Lead	ND	500 ppb	4.7	14.0	±14.0 ppb	PASS
Mercury	ND	300 ppb	2.3	7.0	±7.0 ppb	PASS

Pesticides	MSP-7.5.1.8	limit	LOD	LOQ	error	result
Pyrethrin	ND	1.00 ppm	0.003	0.008	±0.008 ppm	PASS
Pyridaben	ND	3.00 ppm	0.001	0.003	±0.003 ppm	PASS
Spinetoram	ND	3.00 ppm	0.003	0.010	±0.010 ppm	PASS
Spinosad	ND	3.00 ppm	0.006	0.019	±0.019 ppm	PASS
Spiromesifen	ND	12.00 ppm	0.003	0.009	±0.009 ppm	PASS
Spirotetramat	ND	13.00 ppm	0.002	0.007	±0.007 ppm	PASS
Spiroxamine	ND	0.00 ppm	0.001	0.002	±0.002 ppm	PASS
Tebuconazole	ND	2.00 ppm	0.005	0.015	±0.015 ppm	PASS
Thiacloprid	ND	0.10 ppm	0.001	0.003	±0.003 ppm	PASS
Thiamethoxam	ND	4.50 ppm	0.003	0.009	±0.009 ppm	PASS
Trifloxystrobin	ND	30.00 ppm	0.002	0.007	±0.007 ppm	PASS

SECURITY FEATURE: WATERMARK MUST MATCH CERTIFICATE ID AND ISSUE DATE

Certified by:

Kyle Larson, MSC
Deputy Director

Jacob Harris
QA Manager



https://customer.a2la.org/index.cfm?event=directory_detail&labPID=42363582-5128-4C8F-871A-419DC43B007

Stillwater Laboratories Inc.
MT License L0001, L0007
6073 US93N Suite 5, Olney MT 59927
406-881-2019

INSTRUMENTS: Potency by HPLC (LC2030C-UV), solvents and terpenes by GCMS (QP2020A/IS20), 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: [cannabinoid]_{HPLC} x volume_{dilution}/m_{dry}. ... Decarboxylated cannabinoid concentration is calculated XXX_{total} = 0.877 x XXX_a + 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 s_e² = Σ(δi/θ)²s_e² where i is the contributor to error. The 95% confidence range is calculated from: (concentration) ± t_{CL}90 x s_e. Sampling error is not considered in error calculations. ND = not detected (< LOD), NT = not tested, NL = no limit, NA = not applicable. ‡ = decarbed

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Analytical Report

Report Date: 04/13/2021

Work Order: CHSG210407-023
Received Date: 04/07/2021
P.O. #:

Comments:

Sample Num: 21CH03277

Lot Number: 21211

Client Sample Num: Nano BS 25mg Curcumin

Comments:

<u>Analysis</u>	<u>Method Reference</u>	<u>Result</u>	<u>Unit</u>	<u>Analysis Date</u>	<u>Approval Date</u>
Curcuminoid- Bis-demethoxycurcumin	AOAC 2016.16	0.189	mg/svg	04/13/2021	04/13/2021
Curcuminoid- Curcumin	AOAC 2016.16	10.45	mg/svg	04/13/2021	04/13/2021
Curcuminoid- Demethoxycurcumin	AOAC 2016.16	1.40	mg/svg	04/13/2021	04/13/2021
Curcuminoid- Total Curcuminoids	AOAC 2016.16	12.04	mg/svg	04/13/2021	04/13/2021

Reviewed by:



Cheri Turman, PhD., Vice President

certificate ID
1FA07

SG25C

7USC1639 Certificate of Analysis

21147B

rec'd 6/1/2021 12:23:58 PM

order 10901

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

Stillwater Laboratories



per

Microbial	MSP-7.5.1.10	limit	LOD	LOQ	error	result
E.coli	ND	0CFU	0.1	0.2	±0.2CFU	PASS
Salmonella sp.	ND	0CFU	0.1	0.2	±0.2CFU	PASS
molds	17CFU	10000CFU	2.8	8.3	±11.0CFU	PASS

SECURITY FEATURE: WATERMARK MUST MATCH CERTIFICATE ID AND ISSUE DATE

Certified by:

Jacob Harris
QA Manager



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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)

All testing was completed onsite at 6073 US93N, Olney MT. Potency (cannabinoid concentration) is calculated as: $[\text{cannabinoid}] = [\text{cannabinoid}]_{\text{HPLC}} \times \text{volume}_{\text{dilution}} / \text{M}_{\text{dry}}$. Decarboxyted cannabinoid concentration is calculated $\text{XXX}_{\text{total}} = 0.877 \times \text{XXXa} + \text{XXX}$. 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 $s_e^2 = \sum (\partial f / \partial i)^2 s_i^2$ where i is the contributor to error. The 95% confidence range is calculated from: $(\text{concentration}) \pm t_{\text{CL},90} \times s_e$. Sampling error is not considered in error calculations. ND = not detected (< LOD), NT = not tested, NL = no limit, NA = not applicable. ‡ = decarbed

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