



JOY ORGANICS

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Joy Organics CBD Softgels with Curcumin
PRODUCT STRENGTH: 25 mg CBD / 10 mg Curcumin
FILL LOT NUMBER: 2010501
BEST BY DATE: 10/14/2021
SOFTGEL LOT NUMBER*: C32519-07

[*Click on the links to view third-party reports*](#)

Physical Attributes

Test	Method	Specification	Results
Color	SOP-100	Bright Red to Pink	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 shrinkbands 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%)	29.4mg	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 Tinctures, Oregon Action limits apply	ND	PASS
Microbial - Stec E.Coli	SOP-111	Complies with USP 61/62	>LOD	PASS
Microbial - Salmonella	SOP-111	Complies with USP 61/62	>LOD	PASS
Microbial - Yeast and Mold	SOP-111	Complies with USP 61/62	>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 by: Darcie Moran 04/30/2020
 Darcie Moran Date
 Manager of Quality Assurance



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To: **Joy Organics**
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 Fort Collins, CO 80528

COA No.:	M-JO042020-01
COA Date:	04/27/20
Sample Rec'd Date:	04/20/20
ISO/IEC 17025:2005 Standard	Page 1 of 1

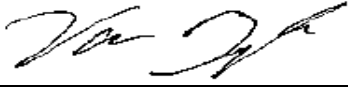
MICROBIOLOGICAL CERTIFICATE OF ANALYSIS

Sample Description: *Softgel 25mg w/Curcumin*
Sample Batch/Lot No.: *2010501*
ACCU Laboratory Ref.: *0737487*
Purchase Order No.: *N/A*
Test Method: *USP*
Notes: *N/A*

Analysis:

Results:

Total Plate Count:	<10 CFU / g
Yeast & Mold Count:	<10 CFU / g
Bile-Tolerant g- Bacteria (coliforms):	Negative
<i>Escherichia coli:</i>	Negative
<i>Salmonella:</i>	Negative

Approved By: 
 Vano Baghdasarian, Laboratory Director

The results of this test relate only to the samples tested. This test report shall not be reproduced except in full, without written approval of the lab. ACCU Labs shall have no liability to anyone with respect to any interpretations or uses of the COA report, decisions made, or actions taken as a result of or based on the data reported.
 Abbreviations: g -: gram negative; g +B: gram positive Bacilli; g +C: gram positive Cocci; TPC: Total Plate Count; TNTC: Too Numerous to Count

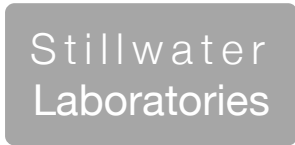
Document Information

File Name and Version: LF-510-01 Certificate of Analysis – V. Micro v.02	Effective Date: 07/25/19	Status: Approved by Vano Baghdasarian
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Curcumin Softgel C32519-07



total cannabinoids	Δ^9 -THC	THCa	total THC
29.7 mg	0 mg	0 mg	0 mg
per capsule	CBD	CBDa	total CBD
	29.4 mg	0 mg	29.4 mg



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

Sample Handling

edible

test ID	sample wt	1.9 g
type	edible	order 6866
lab ID	OCS30	sample date 3/20/2020
unit	capsule	unit weight 0.5 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-7.5.1.9	Hardy Diag
solvents	MSP-7.5.1.6	QP2020/HS20
metals	MSP-7.5.1.1	ICPMS2030



Potency	per capsule	estimated error	Terpenes	%	estimated error	%	estimated error	%	estimated error
tetrahydrocannabinolic acid (THCa)	0%	0 mg ± 0.01 mg	terpenes not tested / not required						
Δ^9 -tetrahydrocannabinol (Δ^9 THC)	0%	0 mg ± 0.01 mg							
Δ^8 -tetrahydrocannabinol (Δ^8 THC)	0%	0 mg ± 0.01 mg							
tetrahydrocannabivarin (THCv)	0%	0 mg ± 0.01 mg							
cannabidiolic acid (CBDa)	0%	0 mg ± 0.01 mg							
cannabidiol (CBD)	5.88%	29.4 mg ± 0.13 mg							
cannabidivarin (CBDv)	0%	0 mg ± 0.01 mg							
cannabigerolic acid (CBGa)	0%	0 mg ± 0.01 mg							
cannabigerol (CBG)	.06%	.3 mg ± 0.02 mg							
cannabinol (CBN)	0%	0 mg ± 0.01 mg							
cannabichromene (CBC)	0%	0 mg ± 0.01 mg							

Solvents	MT limit	OCS30	LOQ	Pesticides (MT)	MT limit	OCS30	LOQ	Pesticides (other)	OCS30	LOQ
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solvents
not tested / not required

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Toxic Metals	MT limit	OCS30	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	OCS30	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

Comments

• All testing was completed onsite at 6073 US93N, Olney MT • Potency (cannabinoid concentration) is calculated from the equation: [cannabinoid] = [cannabinoid]_{HPLC} x 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 x 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} x s_g. Sampling error is not

Certified by:

Justin M Johnston
Deputy Director
6073 US93N, Olney MT 59927
406-881-2019 rdb@stwlabs.com

Joy Organics

Methods	SOP ID	equipment	Comments				Pesticides	result	limit	LOD	LOQ	error	pass/fail
potency	MSP-7.5.1.5	LC-2030					Abamectin	ND	0.3 ppm	0.008	0.023	±0.023 ppm	P
terpenes	MSP-7.5.1.7	QP2020/HS20					Acephate	ND	5.0 ppm	0.008	0.024	±0.024 ppm	P
solvents	MSP-7.5.1.6	QP2020/HS20					Acequinocyl	ND	4.0 ppm	0.007	0.021	±0.021 ppm	P
pesticides	MSP-7.5.1.8	LC-8060					Acetamiprid	ND	5.0 ppm	0.002	0.006	±0.006 ppm	P
mycotoxins	MSP-7.5.1.8	LC-8060					Aldicarb	ND	0.0 ppm	0.002	0.007	±0.007 ppm	P
microbial	MSP-7.5.1.9	Hardy Diag					Azoxystrobin	ND	40.0 ppm	0.002	0.007	±0.007 ppm	P
metals	MSP-7.5.1.10	ICPMS2030					Bifenazate	ND	5.0 ppm	0.002	0.005	±0.005 ppm	P
							Bifenthrin	ND	0.5 ppm	0.001	0.003	±0.003 ppm	P
Mycotoxins	result	limit	LOD	LOQ	error	pass/fail	Boscalid	ND	10.0 ppm	0.022	0.067	±0.067 ppm	P
Ochratoxin A	ND	20 ppb	0.5	1.4	±1.4 ppb	P	Captan	NT	5.0 ppm				NA
Aflatoxin B1B2G1G2	ND	20 ppb	0.5	1.4	±1.4 ppb	P	Carbaryl	ND	0.5 ppm	0.009	0.027	±0.027 ppm	P
Microbial	result	limit	LOD	LOQ	error	pass/fail	Carbofuran	ND	0.0 ppm	0.002	0.005	±0.005 ppm	P
NOT REQUIRED							Chloanthraniliprole	ND	40.0 ppm	0.021	0.064	±0.064 ppm	P
							Chlordane	NT	0.0 ppm				NA
							Chlorfenapyr	ND	0.0 ppm	0.006	0.017	±0.017 ppm	P
							Chloromequat	ND	0.0 ppm	0.008	0.025	±0.025 ppm	P
							Chlorpyrifos	ND	0.0 ppm	0.044	0.133	±0.133 ppm	P
Metals	result	limit	LOD	LOQ	error	pass/fail	Clofentazine	ND	0.5 ppm	0.008	0.024	±0.024 ppm	P
NOT REQUIRED							Coumaphos	ND	0.0 ppm	0.006	0.017	±0.017 ppm	P
							Cyfluthrin	ND	1.0 ppm	0.008	0.024	±0.024 ppm	P
							Cypermethrin	ND	1.0 ppm	0.006	0.017	±0.017 ppm	P
							Daminozide	ND	0.0 ppm	0.030	0.091	±0.091 ppm	P
							Dichlorvos	ND	0.0 ppm	0.016	0.047	±0.047 ppm	P
							Diazinon	ND	0.2 ppm	0.001	0.004	±0.004 ppm	P
Residual Solvents	result	limit	LOD	LOQ	error	pass/fail	Dimethoate	ND	0.0 ppm	0.002	0.007	±0.007 ppm	P
NOT REQUIRED							Dimethomorph	NT	20.0 ppm				NA
							Ethoprop	ND	0.0 ppm	0.003	0.008	±0.008 ppm	P
							Ethoprop	ND	0.0 ppm	0.003	0.008	±0.008 ppm	P
							Etoxazole	ND	1.5 ppm	0.004	0.012	±0.012 ppm	P
							Fenhexamid	NT	10.0 ppm				NA
							Fenoxycarb	ND	0.0 ppm	0.004	0.012	±0.012 ppm	P
							Fenpyroximate	ND	2.0 ppm	0.001	0.004	±0.004 ppm	P
							Fipronil	ND	0.0 ppm	0.008	0.024	±0.024 ppm	P
							Flonicamid	ND	2.0 ppm	0.108	0.323	±0.323 ppm	P
							Fludioxonil	ND	30.0 ppm	0.007	0.021	±0.021 ppm	P
							Hexythiazox	ND	2.0 ppm	0.010	0.031	±0.031 ppm	P
							Imazalil	ND	0.0 ppm	0.007	0.021	±0.021 ppm	P
							Imidacloprid	ND	3.0 ppm	0.001	0.004	±0.004 ppm	P
							Kresoxym Methyl	NT	0.0 ppm				NA
							Malathion	ND	5.0 ppm	0.006	0.017	±0.017 ppm	P
							Metalaxyl	ND	15.0 ppm	0.008	0.025	±0.025 ppm	P
							Methiocarb	ND	0.0 ppm	0.004	0.012	±0.012 ppm	P
							Methomyl	ND	0.1 ppm	0.006	0.019	±0.019 ppm	P
							Methyl parathion	ND	0.0 ppm	0.001	0.003	±0.003 ppm	P
							Mevinphos	ND	0.0 ppm	0.006	0.017	±0.017 ppm	P
							Myclobutanil	ND	9.0 ppm	0.001	0.003	±0.003 ppm	P
							Naled	ND	0.5 ppm	0.006	0.017	±0.017 ppm	P
							Oxamyl	ND	0.2 ppm	0.002	0.007	±0.007 ppm	P
							Paclobutrazol	ND	0.0 ppm	0.003	0.009	±0.009 ppm	P
							PCNB	NT	0.2 ppm				NA
							Permethrin	ND	20.0 ppm	0.011	0.033	±0.033 ppm	P
							Phosmet	ND	0.2 ppm	0.003	0.010	±0.010 ppm	P
							Piperonylbutoxide	ND	8.0 ppm	0.011	0.033	±0.033 ppm	P
							Prallethrin	ND	0.4 ppm	0.004	0.012	±0.012 ppm	P
							Propiconazole	ND	20.0 ppm	0.004	0.012	±0.012 ppm	P
							Propoxur	ND	0.0 ppm	0.006	0.019	±0.019 ppm	P
							Pyrethrin	ND	1.0 ppm	0.003	0.008	±0.008 ppm	P
							Pyridaben	ND	3.0 ppm	0.001	0.003	±0.003 ppm	P
							Spinetoram	ND	3.0 ppm	0.004	0.011	±0.011 ppm	P
							Spinosad	ND	3.0 ppm	0.007	0.022	±0.022 ppm	P
							Spiromesifen	ND	12.0 ppm	0.003	0.010	±0.010 ppm	P
							Spiromesifen	ND	12.0 ppm	0.003	0.010	±0.010 ppm	P
							Spiromesifen	ND	12.0 ppm	0.003	0.010	±0.010 ppm	P
							Spirotetramat	ND	13.0 ppm	0.003	0.008	±0.008 ppm	P
							Spiroxamine	ND	0.0 ppm	0.001	0.003	±0.003 ppm	P
							Tebuconazole	ND	2.0 ppm	0.005	0.016	±0.016 ppm	P
							Thiacloprid	ND	0.1 ppm	0.001	0.003	±0.003 ppm	P
							Thiamethoxam	ND	4.5 ppm	0.003	0.010	±0.010 ppm	P
							Trifloxystrobin	ND	30.0 ppm	0.002	0.007	±0.007 ppm	P

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

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