

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Joy Organics CBD Softgels with Curcumin
PRODUCT STRENGTH: 25 mg CBD / 10 mg Curcumin
SOFTGEL LOT: 21237A
BEST BY DATE: 04/07/2023
SOFGEL BULK BATCH : 21211

Click on the links to view third-party reports

Physical Attributes

Test	Method	Specification	Results
Color	Joy Internal	Red to Amber	PASS
Odor	Joy Internal	No Odor	PASS
Appearance	Joy Internal	Dry, ovoid softgel capsules in container with lid and shrink-band	PASS
Primary Package Eval.	Joy Internal	Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval.	Joy Internal	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	HPLC-UV DAD	*NLT 25 mg / softgel	25.8 mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: <0.01% THC (Broad Spectrum)	ND	PASS
Expanded Pesticide Panel	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	ND	PASS
Microbial Escherichia coli (STEC)	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	Absent	PASS
Microbial Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	Absent	PASS
Microbial Yeast and Mold	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ² CFU/gram	Below LOQ	PASS
Microbial Total Coliforms*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ² CFU/gram	Below LOQ	PASS
Microbial Total Aerobic Count*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ³ CFU/gram	Below LOQ	PASS
Heavy Metals Panel	ICP-MS	Arsenic (As): ≤1.5 ppm Cadmium (Cd): ≤0.5 ppm Lead (Pb): ≤0.5 ppm Mercury (Hg): ≤1.5 ppm	ND	PASS
Mycotoxins	ICP-MS	Total Aflatoxins <20 ppb† Afltoxin B1 < 20 ppb Ochratoxin < 20 ppb	ND	PASS
Residual Solvents	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	ND	PASS


* Level of Quantitation, † Parts Per Million ‡ Part Per Billion
 CFU/g=Colony Forming Units per Gram
 *Nothing Less Than
 10²=100 CFU
 10³=1,000 CFU


Quality Certified Kayla Kolber 08/27/2021
 Kayla Kolber Date
 Quality Assurance Technician

Certificate of Analysis

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

Quality Assurance: 

Date: 05/04/2021

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
Fenprophymate	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-419DCFC43B007

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 (QP2020f/S20), 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_i² where i is the contributor to error. The 95% confidence range is calculated from: (concentration) ± t_{CL,90} x s_g. Sampling error is not considered in error calculations. ND = not detected (< LOD), NT = not tested, NL = no limit, NA = not applicable. ‡ = decarbed

Printed 5/3/2021 2:33 PM

SG25C

Batch ID or Lot Number: 21237A	Test: Microbial Contaminants	Reported: 8/26/21	
Matrix: Finished Product	Test ID: T000158962	Started: 8/23/21	USDA License: N/A
Status: N/A	Methods: TM25 (qPCR) TM24, TM26, TM27(Culture Plating): Microbial (Colorado Panel)	Received: 08/20/2021 @ 01:34 PM	Sampler ID: N/A

MICROBIAL CONTAMINANTS DETERMINATION

Contaminant	Method	LOD	LLOQ	ULOQ	Result	Notes
Total Aerobic Count*	TM-26, Culture Plating	10 ² CFU/g	10 ³ CFU/g	1.5x10 ⁵ CFU/g	None Detected	Free from visual mold, mildew, and foreign matter
Total Coliforms*	TM-27, Culture Plating	10 ² CFU/g	10 ² CFU/g	1.5x10 ⁴ CFU/g	None Detected	
Total Yeast and Mold*	TM-24, Culture Plating	10 ² CFU/g	10 ² CFU/g	1.5x10 ⁴ CFU/g	None Detected	
E. coli (STEC)	TM-25, PCR	1 CFU/25 g	NA	NA	Absent	
Salmonella	TM-25, PCR	1 CFU/25 g	NA	NA	Absent	

Brianne Maillot
 Brianne Maillot
 8/26/2021
 11:08:00 AM

Jackson Osaghae-Nosa
 Jackson Osaghae-Nosa
 8/26/2021
 5:16:00 PM

PREPARED BY / DATE

APPROVED BY / DATE

Definitions

LOD = Limit of Detection | LLOQ = Lower Limit of Quantitation | ULOQ = Upper Limit of Quantitation

 CFU/g = Colony Forming Units per Gram | STEC = Shiga Toxin-Producing *E. coli*

* Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form.

Examples:
 10² = 100 CFU
 10³ = 1,000 CFU
 10⁴ = 10,000 CFU
 10⁵ = 100,000 CFU

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC.



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