# CERTIFICATE OF ANALYSIS

PRODUCT NAME: CBD Softgels with Curcumin

PRODUCT STRENGTH: 25 mg CBD / 10 mg Curcumin

 FILL LOT NUMBER:
 20238A

 BEST BY DATE:
 08/26/2021

SOFTGEL LOT NUMBER: GC32520-02

# \*Click on the links to view third-party reports\*

#### Physical Atttributes

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 shrink baintact	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%)	28.5 mg	PASS
Potency - D9-THC	SOP-111	None Detected LOQ: 10 PPM (0.001%)	<u>ND</u>	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 -	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

<sup>\*</sup> Level of Quantitation, † Parts Per Million

Quality Certified by: Kei Horikawa 09/01/2020

Kei Horikawa Date

**Quality Control Manager** 

#### **0KM53** certificate ID

#### SG25C 20238A

Lot# 20238A



Solvents MSP-7.5.1.7

NOT REQUIRED

total cannabinoids 29.1ma

cannabichromene (CBC)

result

per capsule

ND THC‡ CBD‡ 28.5mg

0.33 | 0.98 | ±0.98mg

error

pass/fail

### **7USC1639 Certificate of Analysis**

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

Pesticides MSP-7.5.1.8

Terpenes MSP-7.5.1.6

Stillwater Laboratories

**NOT REQUIRED** 

LOD

LOQ error pass/fail



result

Potency MSP-7.5.1.4	capsule	error LOD LOQ (95%Cl k=2)
total cannabinoids total THC total CBD	29.1mg ND 28.5mg	0.33   0.98   ±1.22mg 0.33   0.98   ±0.98mg 0.33   0.98   ±1.21mg
tetrahydrocannabolic acid (THCa)	ND	0.33   1.00   ±1.00mg
Δ9-tetrahydrocannabinol (Δ9 THC)	ND	0.31   0.94   ±0.94mg
Δ8-tetrahydrocannabinol (Δ8 THC)	ND	0.42   1.26   ±1.26mg
tetrahydrocannabivarin (THCv)	ND	0.35   1.05   ±1.05mg
cannabidiolic acid (CBDa)	ND	0.29   0.87   ±0.87mg
cannabidiol (CBD)	28.5mg	0.33   0.99   ±1.22mg
cannabidivarin (CBDv)	NĎ	0.33   0.99   ±0.99mg
cannabigerolic acid (CBGa)	ND	0.29   0.88   ±0.88mg
cannabigerol (CBG)	<loq< td=""><td>0.36   1.07   ±1.08mg</td></loq<>	0.36   1.07   ±1.08mg
cannabinol (CBN)	ND ND	0.18   0.54   ±0.54mg
1:1		0.001.0001.000

limit

ND

LOD

LOQ

Microbial MSP-7.5.1.10	result	limit	LOD	LOQ	error	pass/fail
Ochratoxin A Aflatoxin B1B2G1G2 NOT REQUIRED	ND ND	20 ppb 20 ppb		1.3   ±   1.3   ±		PASS PASS
Metals MSP-7.5.1.11	result	limit	LOD	LOQ	error	pass/fail
Arsenic	ND	1500 ppb	2.6	17.81±	7.8 ppb	PASS
Cadmium	ND	500 ppb	2.8	18.411	-8 4 nnh	PASS
Lead	ND	500 ppb	4.41	13.1 l ±1	3.1 ppb	PASS
			4.41	13.1 l ±1		PASS PASS
Lead	ND ND	500 ppb	4.41	13.1 l ±1	3.1 ppb	PASS
Lead Mercury	ND ND	500 ppb 300 ppb	4.4 I 2.2 LOD	13.1   ±1 !   6.6   ± LOQ	3.1 ppb 6.6 ppb	PASS PASS
Lead Mercury Pesticides MSP-7.5.1.8 Abamectin Acephate	ND ND result ND ND	500 ppb 300 ppb limit 0.3 ppm 5.0 ppm	4.41 2.2 LOD 0.007 0.008	13.1   ±1 1   6.6   ± LOQ   0.022   0.023	3.1 ppb -6.6 ppb error I ±0.022 I ±0.023	PASS PASS pass/fai
Lead Mercury  Pesticides MSP-7.5.1.8  Abamectin Acephate Acequinocyl	ND ND result ND ND ND	500 ppb 300 ppb limit 0.3 ppm 5.0 ppm 4.0 ppm	4.41 2.2 LOD 0.007 0.008 0.006	13.1 l ±1 1 l 6.6 l ± LOQ 1 0.022 1 0.023 1 0.019	3.1 ppb -6.6 ppb error I ±0.022 I ±0.023 I ±0.019	PASS PASS pass/fai PASS PASS
Lead Mercury  Pesticides MSP-7.5.1.8  Abamectin Acephate Acequinocyl Acetamiprid	ND ND result ND ND ND ND	500 ppb 300 ppb limit 0.3 ppm 5.0 ppm 4.0 ppm 5.0 ppm	4.417 2.2 LOD 0.007 0.008 0.006 0.005	13.1 l ±1 16.6 l ± LOQ 1 0.022 1 0.023 1 0.019 1 0.015	3.1 ppb -6.6 ppb error I ±0.022 I ±0.023 I ±0.019 I ±0.015	PASS PASS pass/fai PASS PASS PASS
Lead Mercury  Pesticides MSP-7.5.1.8  Abamectin Acephate Acequinocyl	ND ND result ND ND ND	500 ppb 300 ppb limit 0.3 ppm 5.0 ppm 4.0 ppm	4.411 2.2 LOD 0.007 0.008 0.006 0.005 0.002	13.1 l ±1 2 l 6.6 l ± LOQ 1 0.022 1 0.023 1 0.019 1 0.015 1 0.006	3.1 ppb -6.6 ppb error I ±0.022 I ±0.023 I ±0.019	PAS PAS pass/fi PAS PAS PAS

	COLICIACO 1VIOI -7.3.1.0	Tesuit	urint	LOD LOQ ellol	passilali
	Chlorpyrifos	ND	0.0 ppm	0.041   0.124   ±0.124 ppm	PASS
	Clofentezine	ND	0.5 ppm	0.008   0.023   ±0.023 ppm	PASS
	Coumaphos	ND	0.0 ppm	0.005   0.016   ±0.016 ppm	PASS
	Cyfluthrin	ND	1.0 ppm	0.007   0.022   ±0.022 ppm	PASS
	Cypermethrin	ND	1.0 ppm	0.005   0.016   ±0.016 ppm	PASS
انبر	Daminozide	ND	0.0 ppm	0.028   0.085   ±0.085 ppm	PASS
DATE	Dichlorvos	ND	0.0 ppm	0.014   0.043   ±0.043 ppm	PASS
	Diazinon	ND	0.2 ppm	0.001   0.003   ±0.003 ppm	PASS
Щ	Dimethoate	ND	0.0 ppm	0.002   0.006   ±0.006 ppm	PASS
AND ISSUE	Etoxazole	ND	1.5 ppm	0.004   0.011   ±0.011 ppm	PASS
Ś	Fenoxycarb	ND	0.0 ppm	0.004   0.011   ±0.011 ppm	PASS
7	Fenpyroximate	ND	2.0 ppm	0.001   0.003   ±0.003 ppm	PASS
Z	Fipronil	ND	0.0 ppm	0.008   0.023   ±0.023 ppm	PASS
4	Flonicamid	ND	2.0 ppm	0.100   0.300   ±0.300 ppm	PASS
₽	Fludioxonil	ND	30.0 ppm	0.007   0.020   ±0.020 ppm	PASS
Щ	Hexythiazox	ND	2.0 ppm	0.010   0.029   ±0.029 ppm	PASS
A	Imazalil	ND	0.0 ppm	0.007   0.020   ±0.020 ppm	PASS
0	Imidacloprid	ND	3.0 ppm	0.001   0.004   ±0.004 ppm	PASS
ш	Malathion	ND	5.0 ppm	0.005   0.016   ±0.016 ppm	PASS
CERTIFICATE	Metalaxyl	ND	15.0 ppm	0.008   0.023   ±0.023 ppm	PASS
Ü,	Methiocarb	ND	0.0 ppm	0.004   0.011   ±0.011 ppm	PASS
0	Methomyl	ND	0.1 ppm	0.006   0.018   ±0.018 ppm	PASS
MATCH	Methyl parathion	ND	0.0 ppm	0.001   0.003   ±0.003 ppm	PASS
$\succeq$	Mevinphos	ND	0.0 ppm	0.005   0.016   ±0.016 ppm	PASS
¥	Myclobutanil	ND	9.0 ppm	0.001   0.003   ±0.003 ppm	PASS
	Naled	ND	0.5 ppm	0.005   0.016   ±0.016 ppm	PASS
S	Oxamyl	ND	0.2 ppm	0.002   0.007   ±0.007 ppm	PASS
₽	Paclobutrazol	ND	0.0 ppm	0.003   0.008   ±0.008 ppm	PASS
WATERMARK MUST	Permethrin	ND	20.0 ppm	0.010   0.030   ±0.030 ppm	PASS
뜻	Phosmet	ND	0.2 ppm	0.003   0.009   ±0.009 ppm	PASS
A	Piperonylbutoxide	ND	8.0 ppm	0.010   0.031   ±0.031 ppm	PASS
≥	Prallethrin	ND	0.4 ppm	0.004   0.011   ±0.011 ppm	PASS
Ш.	Propiconazole	ND	20.0 ppm	0.004   0.011   ±0.011 ppm	PASS
₽.,	Propoxur	ND	0.0 ppm	0.006   0.017   ±0.017 ppm	PASS
≥	Pyrethrin	ND	1.0 ppm	0.003   0.008   ±0.008 ppm	PASS
	Pyridaben	ND	3.0 ppm	0.001   0.003   ±0.003 ppm	PASS
FEATURE:	Spinetoram	ND	3.0 ppm	0.003   0.010   ±0.010 ppm	PASS
5	Spinosad	ND	3.0 ppm	0.007   0.020   ±0.020 ppm	PASS
5/	Spiromesifen	ND	12.0 ppm	0.003   0.009   ±0.009 ppm	PASS
A	Spirotetramat	ND	13.0 ppm	0.002   0.007   ±0.007 ppm	PASS
II.	Spiroxamine	ND	0.0 ppm	0.001   0.003   ±0.003 ppm	PASS
≥	Tebuconazole	ND	2.0 ppm	0.005   0.015   ±0.015 ppm	PASS
-	Thiacloprid	ND	0.1 ppm	0.001   0.003   ±0.003 ppm	PASS
5	Thiamethoxam	ND	4.5 ppm	0.003   0.009   ±0.009 ppm	PASS
SECURITY	Trifloxystrobin	ND	30.0 ppm	0.002   0.007   ±0.007 ppm	PASS

Certified by:

Bifenazate

Carbofuran

Chlorfenapyr

Chloantraniliprole

Bifenthrin

Boscalid

Stillwater Laboratories Inc.

MT License L0001, L00007

5.0 ppm

0.5 ppm

10.0 ppm

0.5 ppm

0.0 ppm

40.0 ppm

0.0 ppm

6073 US93N Suite 5 Olney MT 59927 406-881-2019

Printed

ND ND

ND

ND

ND

ND



0.002 | 0.005 | ±0.005

0.001 | 0.003 | ±0.003

0.021 | 0.062 | ±0.062

0.008 | 0.025 | ±0.025

0.002 | 0.005 | ±0.005

0.020 | 0.059 | ±0.059

0.005 | 0.016 | ±0.016



PASS

PASS

PASS

PASS

PASS

PASS

PASS



Decarboxyted cannabinoid concentration is calculated XXX<sub>total</sub> = 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  $s_s^2 = \sum (\partial f(\partial))^2 s_s^2$  where i is the extribute to prev. The DSF or experimental error is calculated. contributor to error. The 95% confidence range is calculated from: (concentration)  $\pm$  t<sub>CL90</sub> x s<sub>0</sub>. Sampling error is not considered in error calculations. ND = not detected (< LOD), NT = not tested, NL = no limit, NA = not applicable. ‡ = decarbed

• All testing was completed onsite at 6073 US93N, Olney MT • Potency (cannabinoid concentration) is calcuated as: [cannabioid] = [cannabinoid]<sub>HPLC</sub> x volume<sub>dilution</sub>/m<sub>dy</sub>.

Terpene concentration is calcuated: [terpene] = (terpene mass)<sub>GCMS</sub> /

Justin M Johnston Deputy Director

10/19/2020 4:52 PM

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

# CONFIDENTIAL EXTRACTOR

#### **CERTIFICATE OF ANALYSIS**

PRODUCT NAME: CBD Soft Gels Curcumin, 25mg CBD/10mg Curcumin

PRODUCT CODE: GCC3-X-Y-A

LOT NUMBER: GC/C32520-02

DATE OF MANUFACTURE: 26FEB2020 EXPI

**EXPIRATION DATE: 26AUG2021** 

(DDMMMYYYY)

(Expiration date is 18 months under sealed conditions.)

#### **INGREDIENTS:**

Composition of Fill: Polysorbate 80, Polysorbate 20, Fractionated Coconut Oil, Broad Spectrum CBD Hemp Oil, β-Caryophyllene, Curcuminoids

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

Parameter	Method <sup>1</sup>	Specification	Res	sults
Appearance	QCU002	Oval soft gelatin capsule	P	ass
Color	70	Dark Red	P	ass
Cannabinoids		LOQ (ppm)	Wt. (%)	(mg/g)
CBD		20	4.379	43.79
CBD-A		20	< LOQ	< LOQ
Δ9-THC		5	< LOQ	< LOQ
THC-A	**	5	< LOQ	< LOQ
CBN		5	< LOQ	< LOQ
CBN-A	-	5	< LOQ	< LOQ
CBG	QCU001	5	0.067	0.67
CBC	(UHPLC-	5	< LOQ	< LOQ
CBC-A	DAD)	5	< LOQ	< LOQ
Δ8-THC	,	5	< LOQ	< LOQ
CBDV	5)	5	< LOQ	< LOQ
CBDV-A		5	< LOQ	< LOQ
THCV		5	< LOQ	< LOQ
Potency – Total CBD	<del></del> .	90 – 110% of Labelled	26.8 mg CBD/softgel	
Potency = Total CBD	_	Claim for CBD	107% of La	belled Claim
Total THC		0.0%	0.	0%
Identity – CBD		Retention Time ± 0.05min of Standard	-0.02	2 min
Curcumin Content	HPLC-DAD	80 – 120% of Labelled		ımin/softgel
		Claim for Curcumin	82% of La	belled 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:2	USP <2232>	Refer to Oil Specification	Refer to Oil	Specification
Microbial Limits:2	USP<2032>	Refer to Oil Specification	Refer to Oil	Specification

Notes: 'according to Folium Biosciences internal analytical methods, U.S Pharmacopeia or 3<sup>rd</sup> party contract laboratory method. <sup>2</sup> Testing performed on bulk oil. ND=Not Detected, I.QQ=Limit of Quantification, I.QD=Limit of Detection

PLEASE NOTE: Curcumin is naturally bright yellow in color and tends to stain anything it comes into contact with. Any discoloration of the participal container or skin that the curcumin product touches is natural and expected. The yellow coloration is not a reflection of the product quality or indicative along defect.

hy the FDA

any

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

### **CONFIDENTIAL EXTRACTOR**

The above certificate of analysis is based on Product Specification	n (QA-FRM3-0005	GCCS-A-1-A)
Revision No. 01		
Results conform to all specifications: Yes or No		
<b>Storage:</b> Room Temperature, Protect from Light and Protect fr (RH)	om Moisture at le	ss than 50% relative humidit
Allergen Declaration: This product contains sulfites		
Prepared by: Sin Br	Date: _	16 Mar 2020
Quality Control, Folium Biosciences		
Reviewed by:  Quality Control, Folium Biosciences	Date: _	16MAR2020





1755 Victory Blvd. Glendale, CA 91201 Tel: 818.547.3221 Email: acculab@accubclabs.com www.accubclabs.com

COA No.:	M-JO08	82720-01
COA Date:	09/01/20	0
Sample Rec'd Date:	08/27/20	0
ISO/IEC 17025-2017	Standard	Page 1 of 1

### MICROBIOLOGICAL CERTIFICATE OF ANALYSIS

To:

Sample Description: Softgel Capsule 25 mg (Curcumin)

Sample Batch/Lot No.: 20238A
ACCU Laboratory Ref.: 0795108
Purchase Order No.: N/A
Test Method: USP
Notes: N/A

Analysis:	Results:
<b>Total Plate Count:</b>	<10 CFU / g
Yeast & Mold Count:	<10 CFU / g
Bile-Tolerant g- Bacteria (coliforms):	Negative
Escherichia coli:	Negative
Salmonella:	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.03	Effective Date: 05/01/20	Status: Approved by Vano Baghdasarian		