

Certificate of Analysis

Sample Information

CTLA ID: 36227

Date Received: 7/23/2021

Sample Name: Liv eLIVate

Lot Number: 212131

Customer: Origin Nutraceutical



Analysis	Method	MDL	Specification	Result	Units
Cannabinoid Concentration (16)					
Total Cannabinoids	HPLC	0.601	Report	2.4	mg/g
Total Cannabidiol (CBD)	HPLC	0.601	Report	2.4	mg/g
Total Tetrahydrocannabinol (THC)	HPLC	0.060	Report	ND	%
CBDVA	HPLC	0.601	Report	ND	mg/g
CBDV	HPLC	0.601	Report	ND	mg/g
CBDA	HPLC	0.601	Report	ND	mg/g
CBGA	HPLC	0.601	Report	ND	mg/g
CBG	HPLC	0.601	Report	ND	mg/g
CBD	HPLC	0.601	Report	2.4	mg/g
THCV	HPLC	0.601	Report	ND	mg/g
THCVA	HPLC	0.601	Report	ND	mg/g
CBN	HPLC	0.601	Report	ND	mg/g
CBNA	HPLC	0.601	Report	ND	mg/g
Δ9-ΤΗС	HPLC	0.601	Report	ND	mg/g
Δ8-ΤΗС	HPLC	0.601	Report	ND	mg/g
CBL	HPLC	0.601	Report	ND	mg/g
CBC	HPLC	0.601	Report	ND	mg/g
THCA	HPLC	0.601	Report	ND	mg/g
CBCA	HPLC	0.601	Report	ND	mg/g

ND = None Detected

Total CBD = CBD + (CBDA*0.877) Total THC = Δ 9-THC + (THCA*0.877)

7/27/2021

DATE

Quality Manager

Specifications provided by the Customer. Results with an asterisk (*) denote Specifications should be reviewed by the Customer. This Certificate of Analysis represents data for the sample submitted and does not constitute a guarantee of quality for the entire product from which it was taken. These results are provided for the benefit of the Customer. MDL = Method Detection Limit.

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CBD CW

Company Name: EukAFlo
Company Lot Number: Lot 5
Sample Matrix: Distillate

Sample Received: 06/24/2021 Release Date: 06/29/2021 APRC Lot Number: EUF210624A



Total THC 0.13 %

Total CBD 72.53 % Cannabinoids 92.41 %

Pesticides Tested Microbial Tested Residual Solvents Tested

Heavy Metals Tested Terpene Analysis Not Tested

Prepared By: Cierra Gunn

Reviewed By: Riley Hunter



Residual Solvents Analysis Report

Certificate of Analysis

CBD CW

Client Name: EukAFlo Client Lot #: Lot 5 Sample Matrix: Distillate Sample Received: 06-24-2021 APRC Lot #: EUF210624A

Release Date: 06-25-2021





Analyte	Limit (µg/g)†	Concentration	Disposition
1,2 Dimethoxyethane	100	ND	Pass
1,4 Dioxane	380	ND	Pass
1-Butanol	5000	ND	Pass
1-Pentanol	5000	ND	Pass
1-Propanol	5000	ND	Pass
2-Butanol	5000	ND	Pass
2-Butanone	5000	ND /	Pass
2-Ethoxyethanol	160	ND	Pass
2-methylbutane	5000	ND ND	Pass
2-Propanol (Isopropyl Alcohol)	5000	ND	Pass
Acetone	5000	ND	Pass
Acetonitrile	410	ND	Pass
Benzene	2	ND	Pass
Butane	5000	ND	Pass
Cumene	70	ND	Pass
Cyclohexane	3880	ND	Pass
Dichloromethane (Methylene Chloride)	600	ND	Pass
2,2-dimethylbutane	290	ND	Pass
2,3-dimethylbutane	290	ND	Pass
1,2-dimethylbenzene (<i>o</i> -Xylene)	See Xylenes	ND	Pass
1,3,4-dimethylbenzene (<i>m,p</i> -Xylene)	See Xylenes	ND	Pass
Dimethyl Sulfoxide (DMSO)	5000	NT	N/A
Ethanol	5000	ND	Pass

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Analyte	Limit (µg/g)†	Concentration	Disposition
Ethyl Acetate	5000	5000 ND	
Ethylbenzene	See Xylenes	ND	Pass
Ethyl ether	5000	ND	Pass
Ethylene glycol	620	ND	Pass
Ethylene Oxide	50	NT	N/A
Heptane	5000	ND	Pass
Hexane	290	ND	Pass
Isopropyl acetate	5000	ND	Pass
Methanol	3000	ND	Pass
Methylpropane	5000	ND	Pass
2-Methylpentane	290	ND	Pass
3-Methylpentane	290	ND	Pass
N,N-dimethylacetamide	1090	ND	Pass
N,N-dimethylformamide	880	ND ND	Pass
Pentane	5000	ND	Pass
Propane	5000	ND	Pass
Pyridine	100	ND	Pass
Sulfolane	160	ND	Pass
Tetrahydrofuran	720	ND	Pass
Toluene	890	ND	Pass
Xylenes [‡]	2170	ND	Pass

[†] Per Utah state code 4-41a-701(3) Section R68-29-6

Overall Disposition: Pass

Prepared By: Ambika Poudel

Reviewed By: Dr. Prabodh Satyal

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[‡] Total Xylenes is a combination of the following: o-Xylene, m-Xylene, p-Xylene, and Ethylbenzene



HPLC Analysis Report

Cannabinoid Profile Certificate of Analysis

Client: EukAFlo

Sample Name: CBD CW

Sample Matrix: Distillate

Sample Lot: Lot 5

Date Received: 06-24-2021

Date Tested: 06-24-2021

APRC #: EUF210624A

ID#	Cannabinoid	Ret.	Conc.	%	mg/g
		Time	(µg/mL)	(w/w)	
1	Cannabidivarin (CBDV)	2.172	60.383	0.49	4.89
2	Cannabidiolic acid (CBDA)	TNI	INT	N/A	N/A
3	Cannabigerolic acid (CBGA)	INT	INT	N/A	N/A
4	Cannabigerol (CBG)	3.096	1250.083	10.13	101.30
5	Cannabidiol (CBD)	3.266	8950.250	72.53	725.30
6	Tetrahydrocannabivarin (THCV)	INT	INT	N/A	N/A
7	Cannabinol (CBN)	4.760	8.452	0.07	0.68
8	Δ9-Tetrahydrocannabidinol (Δ9-THC)	5.730	15.665	0.13	1.27
9	Δ8-Tetrahydrocannabidinol (Δ8-THC)	5.997	345.917	2.80	28.03
10	Cannabichromene (CBC)	7.507	772.167	6.26	62.57
11	Δ9-Tetrahydrocannabidinolic acid (THCA-A)	ND	ND	N/A	N/A
·					//

Analyzed by: Morley

Reviewed by: C. Gunn

	%	mg/g
Total Cannabinoids	92,41	924.06
Total THC [†]	0.13	1.27
Total CBD [‡]	72.53	725.30

[†] Total THC is calculated by Δ9-THC +(THCA-A*0.877)

Notes:

INT: Concentration could not be quantified due to an interfering substance.

[‡] Total CBD is calculated by CBD + (CBDA*0.877)



PCR-Microarray Analysis Report

Microbial Certificate of Analysis

Client: EukAFlo Date Received: 06-24-2021

Sample Name: CBD CW Date Tested: 06-28-2021
Sample Matrix: Distillate APRC #: EUF210624A

Sample Lot: Lot 5

Total Counts			
Group	Result	Specification+	Disposition
Total Aerobic Bacteria	<100	≤10,000	Pass
Total Bile Tolerant Gram-Negative Bacteria	<100	Report Only	Tested
Total Enterobacteria/Coliforms	<100	Report Only	Tested
Total Yeast and Mold	<100	Report Only	Tested

Specific Organism Identification						
Organism	Result	Specification†	Disposition			
Aspergillus flavus	NT	NT	Not Tested			
Aspergillus fumigatus	NT	NT	Not Tested			
Aspergillus niger	NT \	NT	Not Tested			
Aspergillus terreus	NT	NT	Not Tested			
Escherichia coli – Non shigella	ND	Report Only	Tested			
Escherichia coli – Shigella spp.‡	ND //	Report Only	Tested			
Listeria monocytogenes	ND	Report Only	Tested			
Salmonella - Specific Gene	ND	Report Only	Tested			
Staphylococcus aureus	ND	Report Only	Tested			
Pseudomonas aeruginosa	DENDE	Report Only	Tested			

^{† -} Per Utah State R68-29-8 requirements

Analyzed by:	J. Morley	Note
		<u> </u>

Reviewed by: C. Gunn

^{‡ -} Interpretation is based on presence of Shigella specific genes along with positive findings of STX1 and STX2 genes.

CBD CW_Lot 5_EUF210624A_6252021_925 AM_004

Sample ID: EUF210624A

Date acquired: 6/25/2021 2:40:57 PM

Acquired by: Admin

Data File: C:\LabSolutions\Data\CBD CW_Lot 5_EUF210624A_6252021_925 AM_004.lcd

Vial: 59 | Inj. Volume: 1.0000uL | Tray: 1

Name	Conc.	Unit	Comment 1	Comment 2
Abamectin B1a		ppm	0.5 ppm limit	LOQ = 0.0005 ppm
Acephate		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Acequinocyl		ppm	2 ppm limit	LOQ = 0.0005 ppm
Acetamiprid		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Aldicarb		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Azoxystrobin			0.2 ppm limit	LOQ = 0.0005 ppm
Bifenazate		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Bifenthrin		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Boscalid		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Carbaryl		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Carbofuran		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Chlorantraniliprole			0.2 ppm limit	LOQ = 0.0005 ppm
Chlorfenapyr			1 ppm limit	LOQ = 0.0005 ppm
Chlorpyrifos			0.2 ppm limit	LOQ = 0.0005 ppm
Clofentezine			0.2 ppm limit	LOQ = 0.0005 ppm
Cyfluthrin			1 ppm limit	LOQ = 0.005 ppm
Cypermethrin			1 ppm limit	LOQ = 0.0005 ppm
Daminozide		ppm	1 ppm limit	LOQ = 0.01 ppm
Diazinon			0.2 ppm limit	LOQ = 0.005 ppm
Dichlorvos (DDVP)			0.1 ppm limit	LOQ = 0.0025 ppm
Dimethoate			0.2 ppm limit	LOQ = 0.0005 ppm
Ethoprophos			0.2 ppm limit	LOQ = 0.0005 ppm
Etofenprox			0.4 ppm limit	LOQ = 0.0005 ppm
Etoxazole			0.2 ppm limit	LOQ = 0.0005 ppm
Fenoxycarb			0.2 ppm limit	LOQ = 0.0005 ppm
Fenpyroximate		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Fipronil			0.4 ppm limit	LOQ = 0.005 ppm
Flonicamid		ppm	1 ppm limit	LOQ = 0.0005 ppm
Fludioxonil			0.4 ppm limit	LOQ = 0.0005 ppm
Hexythiazox			1 ppm limit	LOQ = 0.0005 ppm
Imazalil			0.2 ppm limit	LOQ = 0.0005 ppm
Imidacloprid		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Kresoxim-methyl			0.4 ppm limit	LOQ = 0.0005 ppm
Malathion			0.2 ppm limit	LOQ = 0.0005 ppm
Metalaxyl		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Methiocarb			0.2 ppm limit	LOQ = 0.0005 ppm
Methonyl			0.4 ppm limit	LOQ = 0.0005 ppm
MGK 264 (Pyrodone)			0.2 ppm limit	LOQ = 0.0005 ppm
Myclobutanil			0.2 ppm limit	LOQ = 0.0005 ppm
Naled			0.5 ppm limit	LOQ = 0.0005 ppm
Oxamyl			1 ppm limit	LOQ = 0.0005 ppm
Paclobutrazol			0.4 ppm limit	LOQ = 0.0005 ppm
Parathion Methyl		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Permethrins		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Phosmet			0.2 ppm limit	LOQ = 0.0005 ppm
			2 ppm limit	LOQ = 0.0005 ppm
Prallethrin				LOQ = 0.0005 ppm
			0.2 ppm limit	·
Propiconazole			0.4 ppm limit	LOQ = 0.0005 ppm
Propoxur Danathaia I		P P · · ·	0.2 ppm limit	LOQ = 0.0005 ppm
Pyrethrin I			0.5 ppm limit	LOQ = 0.0005 ppm
Pyrethrin II		P P · · ·	0.5 ppm limit	LOQ = 0.0005 ppm
Pyridaben			0.2 ppm limit	LOQ = 0.0005 ppm
Spinosad A		ppm	0.1 ppm limit	LOQ = 0.0005 ppm
Spinosad D			0.1 ppm limit	LOQ = 0.0005 ppm
Spiromesifen			0.2 ppm limit	LOQ = 0.0005 ppm
Spirotetramat		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Spiroxamine		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Tebuconazole		ppm	0.4 ppm limit	LOQ = 0.0005 ppm
Thiacloprid		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Thiamethoxam		ppm	0.2 ppm limit	LOQ = 0.0005 ppm
Trifloxystrobin		ppm	0.2 ppm limit	LOQ = 0.0005 ppm

Comment:

Analyzed by: Dr. Noura Dosoky Reviewed by: Dr. Prabodh Satyal **Date:** 6/25/2021 **Date:** 6/25/2021



ICP-MS Analysis Report

Heavy Metal Certificate of Analysis

Client: EukAFlo Date Received: 06/24/2021

Sample Name: CBD CW Date Released: 06/29/2021

Sample Matrix: Distillate APRC #: EUF210624A

Sample Lot: Lot 5

	Analyte	Conc. (ppm)	Specification [†] (ppm)	Disposition
Arsenic		0.002	<.2.00	Pass
Cadmium		0.019	< 0.82	Pass
Mercury		<0.001	< 0.40	Pass
Lead		0.005	< 1.20	Pass

Prepared by: Cierra Gunn / Per Utah State Code 4-41a-701 (3) section R68-29-7

Reviewed by: Riley Hunter

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