



Folium Biosciences

CERTIFICATE OF QUALITY ASSURANCE

PRODUCT NAME: Full Spectrum CBD Oil

PRODUCT CODE: CF-TO-20%-HSO-BULK

LOT NUMBER: JP070720B3 (Sales Order# TANN-031-SG-2, 1,030 g Active, Total of 5,100 g)

OIL BATCH NUMBER: COTO20-01

DATE OF MANUFACTURE: 07Jul2020

Expiration date is 24 months under sealed conditions.

ACTIVE INGREDIENT: Full Spectrum CBD Oil

INACTIVE INGREDIENTS: Hemp Seed Oil

Attributes	Acceptance Criteria	Results	Test Method
Appearance	Viscous Amber Oil Possible Crystal Formation	Conforms	QCU002
Odor	Characteristic	Conforms	QCU002
Color	Dark Amber	Conforms	QCU002
Dissolution	Not cloudy or turbid, characteristic color	Conforms	QCU002
Cannabinoid Content	20% total CBD, < 0.3% THC	20% total CBD, < 0.3% THC	QCU001
Microbial Testing	Total Aerobic Count <2000 CFU/g Total Yeast & Mold <200 CFU/g	Conforms	USP<2021>

Package	Acceptance Criteria	Results
Primary Package	Container dedusted and wiped clean. Container caps screwed on tight	Conforms
Secondary Package	Carton Sturdy and clean. Sufficient cushion material exists. Carton taped on all sides	Conforms

Note: When sampling, manufacturing, or formulating with this oil, the oil MUST first be heated and liquefied at 70-75°C and mixed thoroughly. Attempting to sample the oil when it is in a semi-solid state will not result in accurate analytical results.
Storage: Room Temperature, Protect from Light

Prepared by: Nathaniel Amy

Date: 08 Jul 2020

Inspection Control, Folium Biosciences

Reviewed by: Julia D. Beach

Date: 08 Jul 2020

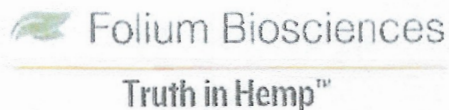
Inspection Control, Folium Biosciences

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

www.foliumbiosciences.com

Phone: 719-574-2159

info@foliumbiosciences.com



CERTIFICATE OF ANALYSIS

PRODUCT NAME: Full Spectrum CBD Hemp Oil

PRODUCT CODE: BO-TO-Y-Z-A

LOT NUMBER: COTO20-01

DATE OF MANUFACTURE: 05FEB2020
(DDMMYYYY)


EXPIRATION DATE: 05FEB2022
(Expiration date is 24 months
under sealed conditions.)

INGREDIENTS: Full Spectrum CBD Hemp Oil

Parameter	Method ¹	Specification	Results
Appearance		Viscous Oil, Possible Crystal Formation	Pass
Color	QCU002	Pale yellow to amber to brown	Pass
Dissolution		Soluble and Translucent	Pass
Cannabinoids		LOQ (ppm)	Wt. (%)
CBD		20	62.026
CBD-A		20	0.446
Δ9-THC		5	2.600
THC-A		5	0.075
CBN		5	0.146
CBN-A		5	< LOQ
CBG	QCU001	5	1.371
CBC	(UHPLC-	5	2.385
CBC-A	DAD)	5	< LOQ
Δ8-THC		5	0.124
CBDV		5	0.553
CBDV-A		5	< LOQ
THCV		5	< LOQ
Potency – Total CBD		≥40.0 wt%	62.4 wt%
Total THC		≥0.3%	2.7 wt%
Identity – CBD		Retention Time ± 0.05min of Standard	-0.01min
Terpenes		For Information Only	
α- Bisabolol			0.514%
Caryophyllene			1.073%
Caryophyllene Oxide	GC-MS		0.186%
Guaiol	(Green Scientific)		0.147%
Humulene			0.495%
Linalool			0.043%
Trans-Nerolidol			0.130%



This product is not intended to diagnose, treat, cure, or prevent any disease and has not been evaluated by the FDA.
www.foliumbiosciences.com Phone: 719-574-2159 info@foliumbiosciences.com

 Folium Biosciences
Truth in Hemp™

Parameter	Method ¹	Specification	Results
Pesticides	LC/MS GC/MS (Green Scientific)	Conforms to EPA limits	Conforms to EPA limits
Residual Solvents			
Ethanol		5000 ppm	< LOQ
Methanol	USP	3000 ppm	ND
Pentane	<467>	5000 ppm	ND
Acetone		5000 ppm	< LOQ
Isopropyl Alcohol	GC FID (Green Scientific)	5000 ppm	ND
Heptane		5000 ppm	ND
Hexane		290 ppm	ND
Heavy Metals			
Arsenic	USP	<1.5 ppm	< LOQ
Cadmium	<2232>	<0.5 ppm	< LOQ
Lead	ICP-MS	<0.5 ppm	< LOQ
Mercury	(Green Scientific)	<0.2 ppm	< LOQ
Microbial Limits			
Total aerobic plate count	USP	<1000cfu/g	Below Threshold
Total yeast & mold	<2023>	<100cfu/g	Below Threshold
Total coliforms	(Green Scientific)	None	Below Threshold
E. coli		None	Below LOD
Salmonella		None	Below LOD
Mycotoxins			
Aflatoxin B1	USP	<5 ppb	ND
Aflatoxin B2	<561>	<5 ppb	ND
Aflatoxin G1		<5 ppb	ND
Aflatoxin G2	LC-MS	<5 ppb	ND
Total Mycotoxins	(Green Scientific)	<20 ppb	ND

Notes: ¹according to Folium Biosciences internal analytical methods, US Pharmacopeia or 3rd party contract laboratory methods.
ND=Not Detected; LOQ=Limit of Quantitation; LOD=Limit of Detection

Results conform to all specifications: Yes or No

Note: When sampling, manufacturing, or formulating with this oil, the oil MUST first be heated and liquefied at 70-75°C and mixed thoroughly. Attempting to sample the oil when it is in a semi-solid state will not result in accurate analytical results.

Storage: Room Temperature, Protect from Light

COPY

Prepared by: Jill Bogdan
Quality Control, Folium Biosciences

Date: 26 Feb 2020

Reviewed by: Chris DiDomenico
Quality Control, Folium Biosciences

Date: 26 FEB 2020

This product is not intended to diagnose, treat, cure, or prevent any disease and has not been evaluated by the FDA.
www.foliumbiosciences.com Phone: 719-574-2159 info@foliumbiosciences.com