

Effective 12Mar2021

**CERTIFICATE OF QUALITY ASSURANCE****PRODUCT NAME:** Broad Spectrum Hemp Oil Tinctures**PRODUCT CODE:** T-NO-250mg-NF-MCT-BR-1oz**LOT NUMBER:** JP032321T7 (Sales Order# THDO-007-CT-1, (Total of (500) 1 oz bottles)**OIL BATCH NUMBER:** CONO20-40**DATE OF MANUFACTURE:** 23Mar2021*Expiration date is 24 months under sealed conditions.***ACTIVE INGREDIENTS:** Broad Spectrum Hemp Oil**INACTIVE INGREDIENTS:** Medium Chain Triglycerides (MCT Oil)

Attributes	Acceptance Criteria	Results	Test Method
Appearance	Thin Oil	Conforms	QCU002
Odor	Characteristic	Conforms	QCU002
Color	Clear to Light Amber	Conforms	QCU002
Cannabinoid Content	NLT 95% of target concentration CBD, 0.0% THC	250 mg CBD per 1 oz, 0.0% THC	QCU001

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: Bulk tinctures assume an oil density of 0.92g/mL. Therefore, to fill 1 oz tinctures, we recommend filling them to 28 grams in order to ensure accurate dosing. The density can be used to calculate the fill weight for other package sizes.

Storage: Room Temperature, Protect from Light

Prepared by: Brandon Roseman Date: 07Apr21
Inspection Control, Folium Biosciences

Reviewed by: James Miner Date: 08APR21
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.



CERTIFICATE OF ANALYSIS

PRODUCT NAME: Broad Spectrum CBD Oil (0.0% THC)

PRODUCT CODE: BO-NO-Y-Z-A

LOT NUMBER: CONO20-40

DATE OF MANUFACTURE: 06NOV2020
(DDMMYYYYY)

EXPIRATION DATE: 06NOV2022

(Expiration date is 24 months
under sealed conditions.)

INGREDIENTS: Broad Spectrum CBD Oil (0.0% THC)

Parameter	Method ¹	Specification	Results
Appearance	QCU002	Viscous Oil, Possible Crystal Formation	Pass
Color		Pale yellow to amber to brown	Pass
Dissolution		Soluble and translucent	Pass
Cannabinoids	QCU001 (UHPLC-DAD)	LOQ (ppm)	Wt. (%)
CBD		20	86.249
CBD-A		20	< LOQ
Δ9-THC		5	0.027
THC-A		5	< LOQ
CBN		5	0.028
CBN-A		5	< LOQ
CBG		5	< LOQ
CBC		5	< LOQ
CBC-A		5	< LOQ
Δ8-THC		5	< LOQ
CBDV		5	1.390
CBDV-A		5	< LOQ
THCV		5	< LOQ
Potency – Total CBD	NLT 80.0 wt%		86.2 wt%
Total THC	0.0%		0.0%
Identity – CBD	Retention Time ± 0.05min of Standard		-0.01 min
Terpenes	For Information Only		
β-Caryophyllene	GC-MS (CannaSafe)		0.25%
Caryophyllene Oxide			0.14%
Guaiol			0.14%
α-Humulene			< LOQ
Linalool			0.04%



Parameter	Method ¹	Specification	Results
Pesticides	LC/MS GC/MS (CannaSafe)	Conforms to EPA limits	Pass
Residual Solvents			
Ethanol		5000 ppm	Pass
Methanol	USP	3000 ppm	Pass
Pentane	<467>	5000 ppm	Pass
Acetone		5000 ppm	Pass
Isopropyl Alcohol	GC FID	5000 ppm	Pass
Heptane	(CannaSafe)	5000 ppm	Pass
Hexane		290 ppm	Pass
Heavy Metals			
Arsenic	USP	<1.5 ppm	Pass
Cadmium	<2232>	<0.5 ppm	Pass
Lead	ICP-MS	<0.5 ppm	Pass
Mercury	(CannaSafe)	<0.2 ppm	Pass
Microbial Limits			
Total aerobic plate count	USP	<1000 cfu/g	Pass
Total yeast & mold	<2023>	<100 cfu/g	Pass
Enterobacteriaceae		<10 MPN/g	Pass
Aspergillus	(CannaSafe)	Absent	Pass
E. coli		Absent	Pass
Salmonella		Absent	Pass
Mycotoxins			
Aflatoxin B1	USP	<5ppb	Pass
Aflatoxin B2	<561>	<5ppb	Pass
Aflatoxin G1		<5ppb	Pass
Aflatoxin G2	LC-MS	<5ppb	Pass
Total Aflatoxins	(CannaSafe)	<20ppb	Pass
Ochratoxin A		<10ppb	Pass

Notes: ¹according to Folium Biosciences internal analytical methods, US Pharmacopeia or 3rd party contract laboratory method.
ND=Not Detected

The above certificate of analysis is based on Product Specification (QA-FRM3-0005 BO-NO-Y-Z-A)

Revision No. 01

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, Heat and Moisture

Prepared by: Blake Breitmeyer
Quality Control, Folium Biosciences

Date: 17 Mar 2021

Reviewed by: Chris Didomenico
Quality Control, Folium Biosciences

Date: 17 MAR 2021

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