

**CERTIFICATE OF QUALITY ASSURANCE****PRODUCT NAME:** Broad Spectrum Hemp Oil Tinctures**PRODUCT CODE:** T-NO-500mg-NF-MCT-BR-1oz**LOT NUMBER:** JP032321T8 (Sales Order# THDO-007-CT-3, (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 Yellow	Conforms	QCU002
Cannabinoid Content	NLT 95% of target concentration CBD, 0.0% THC	500 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: *John Kott* Date: 07MAR2021  
Inspection Control, Folium Biosciences

Reviewed by: *John U. Mire* Date: 08MAR21  
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  
(DDMMYYYY)

**EXPIRATION DATE:** 06NOV2022  
(Expiration date is 24 months  
under sealed conditions.)

**INGREDIENTS:** Broad Spectrum CBD Oil (0.0% THC)

Parameter	Method <sup>1</sup>	Specification		Results
Appearance	QCU002	Viscous Oil, Possible Crystal Formation		Pass
Color		Pale yellow to amber to brown		Pass
Dissolution		Soluble and translucent		Pass
<b>Cannabinoids</b>	QCU001 (UHPLC-DAD)	<b>LOQ (ppm)</b>	<b>Wt. (%)</b>	<b>(mg/g)</b>
CBD		20	86.249	862.490
CBD-A		20	< LOQ	< LOQ
Δ9-THC		5	0.027	0.270
THC-A		5	< LOQ	< LOQ
CBN		5	0.028	0.280
CBN-A		5	< LOQ	< LOQ
CBG		5	< LOQ	< LOQ
CBC		5	< LOQ	< LOQ
CBC-A		5	< LOQ	< LOQ
Δ8-THC		5	< LOQ	< LOQ
CBDV		5	1.390	13.895
CBDV-A		5	< LOQ	< LOQ
THCV		5	< LOQ	< LOQ
Potency – Total CBD		NLT 80.0 wt%		86.2 wt%
Total THC		0.0%		0.0%
Identity – CBD	GC-MS (CannaSafe)	Retention Time ± 0.05min of Standard		-0.01 min
<b>Terpenes</b>		For Information Only		
β-Caryophyllene				0.25%
Caryophyllene Oxide				0.14%
Guaiol				0.14%
α-Humulene				< LOQ
Linalool				0.04%



Parameter	Method <sup>1</sup>	Specification	Results
Pesticides	LC/MS GC/MS (CannaSafe)	Conforms to EPA limits	Pass
<b>Residual Solvents</b>			
Ethanol		5000 ppm	Pass
Methanol	USP	3000 ppm	Pass
Pentane	<467>	5000 ppm	Pass
Acetone		5000 ppm	Pass
Isopropyl Alcohol	GC FID (CannaSafe)	5000 ppm	Pass
Heptane		5000 ppm	Pass
Hexane		290 ppm	Pass
<b>Heavy Metals</b>			
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
<b>Microbial Limits</b>			
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
<b>Mycotoxins</b>			
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

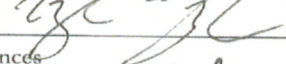
Notes: <sup>1</sup>according to Folium Biosciences internal analytical methods, US Pharmacopeia or 3<sup>rd</sup> party contract laboratory method.  
ND=Not Detected


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  Date: 17 Mar 2021  
Quality Control, Folium Biosciences

Reviewed by: Chris Didomenico  Date: 17 MAR 2021  
Quality Control, Folium Biosciences

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