

Lab Report

Product: CBD Oil Tincture - 1500mg

Lot Number: JP121420T3

Type: THC-Free Phytocannabinoid-Rich 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	87.738
CBD-A		20	< LOQ
Δ9-THC		5	< LOQ
THC-A		5	< LOQ
CBN		5	0.028
CBN-A		5	< LOQ
CBG	QCU001	5	< LOQ
CBC	(UHPLC-	5	< LOQ
CBC-A	DAD)	5	< LOQ
Δ8-THC		5	< LOQ
CBDV		5	1.410
CBDV-A		5	< LOQ
THCV		5	< LOQ
Potency – Total CBD		NLT 80.0 wt%	87.7 wt%
Total THC		0.0%	0.0%
Identity – CBD		Retention Time ± 0.05min of Standard	0.01min
Terpenes		For Information Only	
β-Caryophyllene			0.057%
Caryophyllene Oxide			0.063%
Cis-Nerolidol	GC-MS		< LOQ
Guaiol	(Green Scientific)		0.039%
Linalool			0.024%

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	< LOQ
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	< 1000 cfu/g	Below Threshold
Total yeast & mold	<2023>	< 100 cfu/g	Below Threshold
Total coliforms	(Green Scientific)	None	Below Threshold
E. coli		None	Below LOD
Salmonella		None	Below LOD
Mycotoxins			
Aflatoxin B1	USP	< 5ppb	ND
Aflatoxin B2	<561>	< 5ppb	ND
Aflatoxin G1	LC-MS	< 5ppb	ND
Aflatoxin G2	(Green Scientific)	< 5ppb	ND
Total Mycotoxins		< 20ppb	ND

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

Results conform to all specifications: (Yes) or No

Certificate of Quality Assurance

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

INACTIVE INGREDIENTS: Grape Seed Oil, Orange Oil

Attributes	Acceptance Criteria	Results	Test Method
Appearance	Thin Oil	Conforms	QCU002
Odor	Characteristic	Conforms	QCU002
Color	Light Yellow to Yellow	Conforms	QCU002
Cannabinoid Content	NLT 95% of target concentration CBD, 0.0% THC	1,500 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 0.93g/ml. Therefore, an 8 fl. oz. tincture contains approximately 750 ml of oil.