



250mg

Hammer Hemp Oil COA

Product Name Broad Spectrum CBD Hemp Oil
Product Code BO-NO-Y-Z-A

Ingredients: Phytocannabinoid-Rich Hemp Oil
Inactive Ingredients: Grapeseed Oil, Orange Oil

Parameter	Method	Specification	Results	
Appearance	QCU002	Viscous Oil, Possible Crystal Formation	Pass	
Color		Pale Yellow to Amber to Brown	Pass	
Dissolution		Soluble and translucent	Pass	
Cannabinoids		LOQ (ppm)	WT (%)	(mg/g)
CBD	QCU001 (UHPLC-DAD)	20	85.934	859.34
CBD-A		20	< LOQ	< LOQ
Δ9-THC		5	< LOQ	< LOQ
THC-A		5	< LOQ	< LOQ
CBN		5	0.025	0.25
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	1.41	14.1
CBDV-A		5	< LOQ	< LOQ
THCV		5	< LOQ	< LOQ
Potency - Total CBD			NLT 80.0%	85.00%
Total THC		0.00%	0.00%	
Identity - CBD		Retention Time +/- 0.05min of Standard	0.02 min	
Cannabinoid Content		NLT 95% of target concentration CBD, 0.0% THC	250mg CBD per 1oz 0.0% THC	
Terpenes		For Information Only		
β-Caryophyllene	GC-MS (CannaSafe)		0.25%	
Guaiol			0.13%	
α-Humulene			0.01%	
Linalool			0.04%	

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



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

Notes: *According to Hammer Nutrition 3rd party analytical method, US Pharmacopia or contract laboratory method. **Testing performed on bulk oil. ND=Not detected, LOQ=Limit of Detection

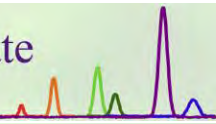
The above certificate of analysis is based on Product Specification (QA-FRM3-005 BO-NO-Y-Z-A) Revision No. 01

Results conform to all specifications Yes
 No

Note: When sampling, manufacturing and formulating with this oil, the oil **MUST** first be heated and liquified 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.

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Certificate ID: **79868**

Received: **3/23/20**

Scan QR Code for authenticity



Hammer Nutrition

4952 Whitefish Stage Road

Whitefish, MT 59937

Attn: Jewel Hiebert

Client Sample ID: **250mg**

Lot Number: **0819-22**

Matrix: **Tincture/Infused Oil - Hemp Seed Oil**

Authorization: Chris Hudalla, Chief Science Officer	Signature: 	Date: 3/28/2020
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The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2017. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

CN: Cannabinoid Profile & Potency [WI-10-17 & WI-10-17-01]

Analyst: JFD

Test Date: 3/26/2020

The client sample was analyzed for plant-based cannabinoids by Liquid Chromatography (LC). The collected data was compared to data collected for certified reference standards at known concentrations.

79868-CN

ID	Weight %	Concentration (mg/mL)			
D9-THC	ND	ND			
THCV	ND	ND			
CBD	0.87	7.83			
CBDV	ND	ND			
CBG	ND	ND			
CBC	ND	ND			
CBN	ND	ND			
THCA	ND	ND			
CBDA	ND	ND			
CBGA	ND	ND			
D8-THC	ND	ND			
exo-THC	ND	ND			
Total	0.87	7.83	0%	Cannabinoids (wt%)	0.9%
Max THC	ND	ND			
Max CBD	0.87	7.83			

Limit of Quantitation (LOQ) = 0.01 wt%

Max THC (and Max CBD) are calculated values for total cannabinoids after heating, assuming complete decarboxylation of the acid to the neutral form. It is calculated based on the weight loss of the acid group during decarboxylation: Max THC = (0.877 x THCA) + THC. This calculation does not include other cannabinoid isomers (eg. D8-THC and exo-THC). ND = None detected above the limits of detection (LOD), which is half of LOQ.

END OF REPORT