

CERTIFICATE OF QUALITY ASSURANCE

PRODUCT NAME: Broad Spec Tincture (All Flavors)

CONCENTRATION: 1000mg - 33.3mg/ml

PRODUCT LOT NUMBER: LB-O-00069

OIL LOT NUMBER: LD-O-00041

MANUFACTURE DATE: 11/20/2020

Expiration date is 18 months under sealed conditions

DATE OF ANALYSIS: 11/25/2020

ACTIVE INGREDIENTS: Phytocannabinoid-Rich Hemp Oil

INACTIVE INGREDIENTS: Certified Organic MCT Oil, Organic Flavor



ANALYSIS RESULTS FOR FINISHED PRODUCT

ATTRIBUTE ANALYSIS

ATTRIBUTE	CRITERIA	DISPOSITION
APPEARANCE	Clear light yellow to medium yellow liquid	PASS
AROMA	Characteristic Hemp Oil Aroma	PASS
CBD CONTENT	Label claim +/- 10%	PASS
THC CONTENT	COMPLIANT OR NON-DETECT	PASS

CANNABINOID ANALYSIS

COMPOUND	RESULT (mg)	CRITERIA
THC	ND	Non-Detect
CBD	1087.62mg	1000mg
CBN	19.92mg	NO CRITERIA
CBG	ND	NO CRITERIA
CBDV	ND	NO CRITERIA
CBC	69.74mg	NO CRITERIA
PASS		

MICROBIAL ANALYSIS

ITEM	SPECIFICATION	RESULT (CFU/g)	DISPOSITION
Ttl Aerobic Count	None Detected	None Detected	PASS
Total Coliforms	None Detected	None Detected	PASS
Total Yeast & Molds	None Detected	None Detected	PASS
E. Coli	None Detected	None Detected	PASS
Salmonella	None Detected	None Detected	PASS

RESIDUAL SOLVENT ANALYSIS

ITEM	SPECIFICATION	RESULT (CFU/g)	DISPOSITION
Propane	None Detected	None Detected	PASS
Butanes	None Detected	None Detected	PASS
Methanol	None Detected	None Detected	PASS
Pentane	None Detected	None Detected	PASS
Ethanol	None Detected	None Detected	PASS
Acentone	None Detected	None Detected	PASS
Isopropyl Alcohol	None Detected	None Detected	PASS
Hexane	None Detected	None Detected	PASS
Ethyl Acetate	None Detected	None Detected	PASS
Benzene	None Detected	None Detected	PASS
Heptanes	None Detected	None Detected	PASS
Toluene	None Detected	None Detected	PASS
Xylenes	None Detected	None Detected	PASS
PASS			

QC Approval: _____

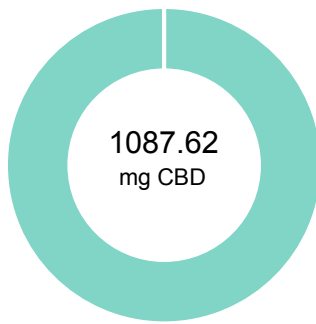
Date: _____



LB-O-00069

Batch ID:		Test ID:	T000111476
Type:	Unit	Submitted:	11/20/2020 @ 11:12 AM
Test:	Potency	Started:	11/25/2020
Method:	TM14	Reported:	11/25/2020

CANNABINOID PROFILE



CBD	3.83%
CBDa	0.00%
delta 9 THC	0.00%
THCa	0.00%

Compound	LOQ (mg)	Result (mg)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	27.41	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC)	13.44	ND	ND
Cannabidiolic acid (CBDA)	4.20	ND	ND
Cannabidiol (CBD)	8.95	1087.62	38.3
Delta 8-Tetrahydrocannabinol (Delta 8THC)	14.66	ND	ND
Cannabinolic Acid (CBNA)	38.02	ND	ND
Cannabinol (CBN)	16.67	19.92	0.7
Cannabigerolic acid (CBGA)	23.94	ND	ND
Cannabigerol (CBG)	13.41	ND	ND
Tetrahydrocannabivarinic Acid (THCVA)	23.37	ND	ND
Tetrahydrocannabivarin (THCV)	11.97	ND	ND
Cannabidivarinic Acid (CBDVA)	4.03	ND	ND
Cannabidivarin (CBDV)	2.17	ND	ND
Cannabichromenic Acid (CBCA)	21.03	ND	ND
Cannabichromene (CBC)	24.31	69.74	2.5
Total Cannabinoids		1177.28	41.5
Total Potential THC**		ND	ND
Total Potential CBD**		1087.62	38.3

NOTES:

of Servings = 1, Sample Weight=28.4g

N/A

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)
 * Total Cannabinoids result reflects the absolute sum of all cannabinoids detected.
 ** Total Potential THC/CBD is calculated using the following formulas
 to take into account the loss of a carboxyl group during
 decarboxylation step.
 Total THC = THC + (THCa * (0.877)) and
 Total CBD = CBD + (CBDa * (0.877))
 ND = None Detected (Defined by Dynamic Range of the method)

FINAL APPROVAL

	Mara Miller 25-Nov-2020 3:36 PM		Greg Zimpfer 25-Nov-2020 4:05 PM
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PREPARED BY / DATE

APPROVED BY / DATE

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC. ISO/IEC 17025:2005 Accredited A2LA Certificate Number 4329.02



Certificate #4329.02



LB-O-00069

Batch ID:		Test ID:	T000111477
Type:	Concentrate	Submitted:	11/20/2020 @ 11:12 AM
Test:	Residual Solvents	Started:	11/25/2020
Method:	TM04	Reported:	11/25/2020

RESIDUAL SOLVENTS

Solvent	Dynamic Range (ppm)	Result (ppm)
Propane	101 - 2017	*ND
Butanes (Isobutane, n-Butane)	188 - 3762	*ND
Methanol	56 - 1122	*ND
Pentane	93 - 1861	*ND
Ethanol	96 - 1924	*ND
Acetone	94 - 1881	*ND
Isopropyl Alcohol	99 - 1982	*ND
Hexane	6 - 113	*ND
Ethyl Acetate	95 - 1910	*ND
Benzene	0.2 - 3.7	*ND
Heptanes	92 - 1841	*ND
Toluene	17 - 341	*ND
Xylenes (m,p,o-Xylenes)	122 - 2431	*ND


* ND = None Detected (Defined by Dynamic Range of the method)

NOTES:
N/A

FINAL APPROVAL


 Ryan Weems
 25-Nov-2020
 3:53 PM

PREPARED BY / DATE


 Greg Zimpfer
 25-Nov-2020
 3:56 PM

APPROVED BY / DATE

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Certificate #4329.02

LB-O-00069

Batch ID:	N/A	Test ID:	T000111478
Type:	Concentrate	Submitted:	11/20/2020 @ 11:12 AM
Test:	Microbial Contaminants	Started:	11/20/2020
Method:	TM24, TM25, TM26, TM27, TM28	Reported:	11/23/2020

MICROBIAL CONTAMINANTS

Contaminant	Result (CFU/g)*
Total Aerobic Count**	None Detected
Total Coliforms**	None Detected
Total Yeast and Molds**	None Detected
E. coli	Absent
STEC and 0157 E. coli	None Detected
Salmonella	None Detected

* CFU/g = Colony Forming Unit per Gram

** Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form.

Examples: $10^2 = 100$ CFU
 $10^3 = 1,000$ CFU
 $10^4 = 10,000$ CFU
 $10^5 = 100,000$ CFU

NOTES:

Free from visual mold, mildew, and foreign matter
TYM: None Detected
Total Aerobic: None Detected**FINAL APPROVAL**
Nick Tumminaro
23-Nov-2020
2:32 PM
Greg Zimpfer
23-Nov-2020
6:42 PM

PREPARED BY / DATE

APPROVED BY / DATE

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