

# CERTIFICATE OF QUALITY ASSURANCE

PRODUCT NAME: Broad Spec Tincture (All Flavors)

CONCENTRATION: 500mg - 16.6mg/ml

PRODUCT LOT NUMBER: LB-O-00068

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	529.79mg	500mg
CBN	ND	NO CRITERIA
CBG	ND	NO CRITERIA
CBDV	ND	NO CRITERIA
CBC	33.70mg	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: \_\_\_\_\_

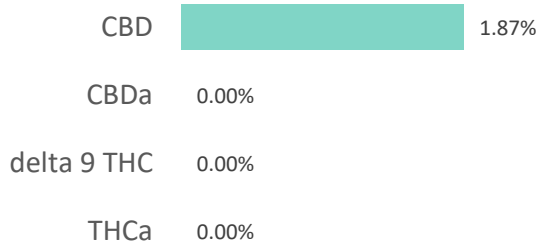
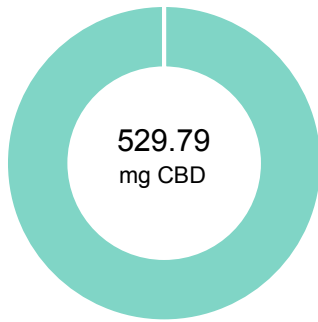
Date: \_\_\_\_\_



LB-O-00068

<b>Batch ID:</b>		<b>Test ID:</b>	T000111473
<b>Type:</b>	Unit	<b>Submitted:</b>	11/20/2020 @ 11:12 AM
<b>Test:</b>	Potency	<b>Started:</b>	11/25/2020
<b>Method:</b>	TM14	<b>Reported:</b>	11/25/2020

### CANNABINOID PROFILE



Compound	LOQ (mg)	Result (mg)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	26.24	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC)	12.86	ND	ND
Cannabidiolic acid (CBDA)	4.02	ND	ND
Cannabidiol (CBD)	8.57	529.79	18.7
Delta 8-Tetrahydrocannabinol (Delta 8THC)	14.03	ND	ND
Cannabinolic Acid (CBNA)	36.40	ND	ND
Cannabinol (CBN)	15.96	ND	ND
Cannabigerolic acid (CBGA)	22.92	ND	ND
Cannabigerol (CBG)	12.84	ND	ND
Tetrahydrocannabivarinic Acid (THCVA)	22.37	ND	ND
Tetrahydrocannabivarin (THCV)	11.46	ND	ND
Cannabidivarinic Acid (CBDVA)	3.86	ND	ND
Cannabidivarin (CBDV)	2.08	ND	ND
Cannabichromenic Acid (CBCA)	20.13	ND	ND
Cannabichromene (CBC)	23.28	33.70	1.2
<b>Total Cannabinoids</b>		<b>563.49</b>	<b>19.8</b>
Total Potential THC**		ND	ND
Total Potential CBD**		529.79	18.7

#### 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-00068

<b>Batch ID:</b>		<b>Test ID:</b>	T000111474
<b>Type:</b>	Concentrate	<b>Submitted:</b>	11/20/2020 @ 11:12 AM
<b>Test:</b>	Residual Solvents	<b>Started:</b>	11/25/2020
<b>Method:</b>	TM04	<b>Reported:</b>	11/25/2020

### RESIDUAL SOLVENTS

Solvent	Dynamic Range (ppm)	Result (ppm)
Propane	102 - 2044	*ND
Butanes (Isobutane, n-Butane)	191 - 3812	*ND
Methanol	57 - 1137	*ND
Pentane	94 - 1886	*ND
Ethanol	97 - 1950	*ND
Acetone	95 - 1906	*ND
Isopropyl Alcohol	100 - 2009	*ND
Hexane	6 - 115	*ND
Ethyl Acetate	97 - 1935	*ND
Benzene	0.2 - 3.7	*ND
Heptanes	93 - 1866	*ND
Toluene	17 - 345	*ND
Xylenes (m,p,o-Xylenes)	123 - 2464	*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-00068

<b>Batch ID:</b>	N/A	<b>Test ID:</b>	T000111475
<b>Type:</b>	Concentrate	<b>Submitted:</b>	11/20/2020 @ 11:12 AM
<b>Test:</b>	Microbial Contaminants	<b>Started:</b>	11/20/2020
<b>Method:</b>	TM24, TM25, TM26, TM27, TM28	<b>Reported:</b>	11/23/2020

## MICROBIAL CONTAMINANTS

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

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 4329.03. Testing associated with this certificate of analysis performed by an external ISO17025 accredited provider.



Certificate #4329.03