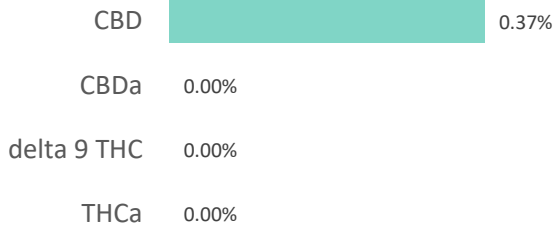
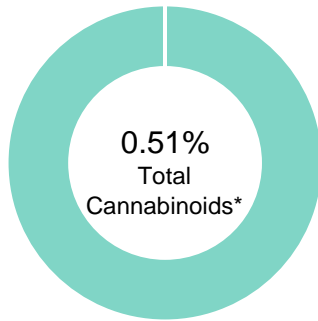


FULL SPECTRUM HEMP CBD OIL TOPICAL BALM

Batch ID:	154346	Test ID:	3867948.0061
Reported:	8-Jul-2019	Method:	TM14
Type:	Concentrate		
Test:	Potency		

CANNABINOID PROFILE



Compound	LOQ (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.02	0.00	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.01	0.00	0.0
Cannabidiolic acid (CBDA)	0.02	0.00	0.0
Cannabidiol (CBD)	0.01	0.37	3.7
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.01	0.00	0.0
Cannabinolic Acid (CBNA)	0.03	0.00	0.0
Cannabinol (CBN)	0.01	0.00	0.0
Cannabigerolic acid (CBGA)	0.02	0.00	0.0
Cannabigerol (CBG)	0.01	0.12	1.2
Tetrahydrocannabivarinic Acid (THCVA)	0.02	0.00	0.0
Tetrahydrocannabivarin (THCV)	0.01	0.00	0.0
Cannabidivarinic Acid (CBDVA)	0.02	0.00	0.0
Cannabidivarin (CBDV)	0.01	0.00	0.0
Cannabichromenic Acid (CBCA)	0.02	0.00	0.0
Cannabichromene (CBC)	0.02	0.02	0.2
Total Cannabinoids		0.51	5.10
Total Potential THC**		0.00	0.00
Total Potential CBD**		0.37	3.70

 NOTES:
 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.

$$\text{Total THC} = \text{THC} + (\text{THCa} * (0.877)) \text{ and } \text{Total CBD} = \text{CBD} + (\text{CBDa} * (0.877))$$
FINAL APPROVAL


Tyler Wiese
 8-Jul-2019
 4:16 PM

PREPARED BY / DATE



Greg Zimpfer
 8-Jul-2019
 5:58 PM

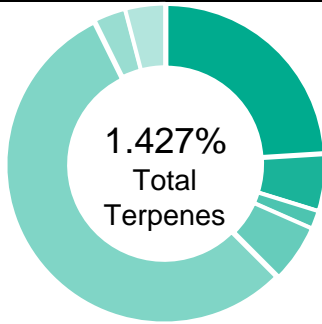
APPROVED BY / DATE

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



Full Spectrum Hemp CBD Oil Tincture Balm

Batch ID:	154346	Test ID:	9085905.0021
Reported:	8-Jul-2019	Method:	TM10
Type:	Concentrate		
Test:	Terpenes		



TERPENE PROFILE


Compound	%(w/w)	mg/g
(-)-alpha-Bisabolol	0.000	0
Camphene	0.031	0.31
delta-3-Carene	0.013	0.13
beta-Caryophyllene	0.029	0.29
(-)-Caryophyllene Oxide	0.000	0
p-Cymene	0.096	0.96
Eucalyptol	0.563	5.63
Geraniol	0.000	0
alpha-Humulene	0.000	0
(-)-Isopulegol	0.000	0
d-Limonene	0.393	3.93
Linalool	0.023	0.23
beta-Myrcene	0.000	0
cis-Nerolidol	0.000	0
trans-Nerolidol	0.000	0
Ocimene	0.000	0
beta-Ocimene	0.000	0
alpha-Pinene	0.171	1.71
(-)-beta-Pinene	0.041	0.41
alpha-Terpinene	0.042	0.42
gamma-Terpinene	0.021	0.21
Terpinolene	0.004	0.04
	1.427%	14.27

PREDOMINANT TERPENES

alpha-Pinene	0.171%
(-)-beta-Pinene	0.041%
beta-Myrcene	0.000%
delta-3-Carene	0.013%
alpha-Terpinene	0.042%
d-Limonene	0.393%
Linalool	0.023%
beta-Caryophyllene	0.029%
alpha-Humulene	0.000%
(-)-alpha-Bisabolol	0.000%

NOTES:
FINAL APPROVAL

	Alex Smith 8-Jul-2019 10:55 AM		Greg Zimpfer 8-Jul-2019 11:05 AM
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PREPARED BY / DATE

APPROVED BY / DATE

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FULL SPECTRUM HEMP CBD OIL TOPICAL BALM

Batch ID:	154346	Test ID:	1713255.002
Reported:	6-Jul-2019	Method:	Topical - Test Methods: TM05, TM06
Type:	Topical		
Test:	Microbial Contaminants		

MICROBIAL CONTAMINANTS

Contaminant	Result (CFU/g)*
Total Aerobic Count**	None Detected
Total Coliforms**	None Detected
Total Yeast and Molds**	None Detected
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

Coliforms: None Detected

FINAL APPROVAL

Robert Belfon
6-Jul-2019
6:03 PM



Mike Branvold
6-Jul-2019
9:27 PM

PREPARED BY / DATE

APPROVED BY / DATE

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Full Spectrum Hemp CBD Oil Topical Balm

Batch ID:	154346	Test ID:	5657758.009
Reported:	8-Jul-2019	Method:	TM04
Type:	Concentrate		
Test:	Residual Solvents		

RESIDUAL SOLVENTS

Solvent	Reportable Range (ppm)	Result (ppm)
Propane	100 - 2000	0
Butanes (Isobutane, n-Butane)	100 - 2000	0
Pentane	100 - 2000	0
Ethanol	100 - 2000	0
Acetone	100 - 2000	0
Isopropyl Alcohol	100 - 2000	124
Hexane	6 - 120	0
Benzene	0.2 - 4	0.0
Heptanes	100 - 2000	0
Toluene	18 - 360	0
Xylenes (m,p,o-Xylenes)	43 - 860	0

NOTES:

Free from visual mold, mildew, and foreign matter.

FINAL APPROVAL

 Sam Smith 8-Jul-2019 12:32 PM	 Greg Zimpfer 8-Jul-2019 2:17 PM
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PREPARED BY / DATE

APPROVED BY / DATE

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