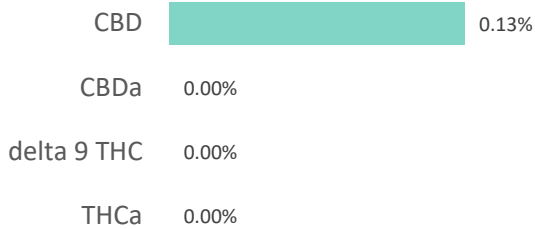
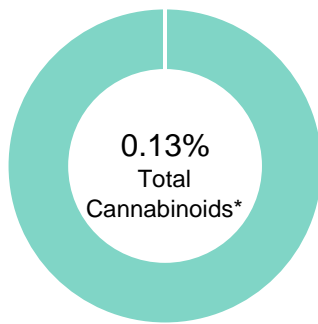


Hemp Balm #166144

Batch ID:	Hemp Balm #166144	Test ID:	3249555.004
Reported:	6-Sep-2019	Method:	TM14
Type:	Concentrate		
Test:	Potency		

CANNABINOID PROFILE


Compound	LOQ (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.00	0.00	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.00	0.00	0.0
Cannabidiolic acid (CBDA)	0.00	0.00	0.0
Cannabidiol (CBD)	0.00	0.13	1.3
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.00	0.00	0.0
Cannabinolic Acid (CBNA)	0.00	0.00	0.0
Cannabinol (CBN)	0.00	0.00	0.0
Cannabigerolic acid (CBGA)	0.00	0.00	0.0
Cannabigerol (CBG)	0.00	0.00	0.0
Tetrahydrocannabivarinic Acid (THCVA)	0.00	0.00	0.0
Tetrahydrocannabivarin (THCV)	0.00	0.00	0.0
Cannabidivarinic Acid (CBDVA)	0.00	0.00	0.0
Cannabidivarin (CBDV)	0.00	0.00	0.0
Cannabichromenic Acid (CBCA)	0.00	0.00	0.0
Cannabichromene (CBC)	0.00	0.00	0.0
Total Cannabinoids		0.13	1.30
Total Potential THC**		0.00	0.00
Total Potential CBD**		0.13	1.30


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.

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


Sam Smith
6-Sep-2019
2:54 PM

PREPARED BY / DATE



David Green
6-Sep-2019
3:01 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



Hemp Balm #166144

Batch ID:	Hemp Balm #166144	Test ID:	8419859.006
Reported:	9-Sep-2019	Method:	Concentrate - Test Methods: TM05, TM06
Type:	Concentrate		
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


Samantha Hoyle
9-Sep-2019
2:16 PM
Greg Zimpfer
9-Sep-2019
2:57 PM

PREPARED BY / DATE

APPROVED BY / DATE

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Hemp Balm #166144

Batch ID:	Hemp Balm #166144	Test ID:	7799543.022
Reported:	11-Sep-2019	Method:	TM04
Type:	Topical		
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	0
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

 Alex Smith 11-Sep-2019 3:34 PM	 Greg Zimpfer 11-Sep-2019 3:46 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

Certificate of Analysis

Elixinol, LLC

555 Burbank St. Unit J
Broomfield Colorado 80020 United States

Sample Name:	Hemp Balm #166144	Eurofins Sample:	8800807
Project ID	ELIXINOL-20190906-0082	Receipt Date	06-Sep-2019
PO Number	CVD	Receipt Condition	Ambient temperature
Lot Number	Hemp Balm #166144	Login Date	06-Sep-2019
Sample Serving Size		Date Started	06-Sep-2019
		Online Order	13484-12352C5A

Analysis

Result

Enterobacteriaceae (Bile-Tolerant Gram-Negative Bacteria) *

Enterobacterial Count <10 MPN/mL

Preparatory Testing of Nutritional and Dietary Supplements *

Bile-Tolerant Gram-Neg Bacteria Suitability Result Pass**

Metals Analysis by ICP-MS

Arsenic <0.0686 ppm
Cadmium <0.0171 ppm
Lead <0.0171 ppm
Mercury <0.00857 ppm

Mycotoxins in Raw Materials

Aflatoxin B1 <0.500 ppb
Aflatoxin B2 <0.500 ppb
Aflatoxin G1 <0.500 ppb
Aflatoxin G2 <0.500 ppb
Ochratoxin A <1.00 ppb

Multi-Residue Analysis for hemp products - 60+ compounds

Matrix Type - To Determine Limit of Quantification (LOQ) Spices - Botanicals - and other Specialty Samples

Abamectin <0.05 mg/kg
Aldicarb <0.05 mg/kg
Aldicarb sulfone (Aldoxycarb) <0.05 mg/kg
Aldicarb sulfoxide <0.05 mg/kg
Azoxystrobin <0.05 mg/kg
Bifenazate <0.05 mg/kg
Bifenthrin <0.05 mg/kg
Carbaryl <0.05 mg/kg
Carbofuran <0.05 mg/kg
Carbofuran-3-hydroxy- <0.05 mg/kg
Chlorantraniliprole <0.05 mg/kg
Chlordane, cis- <0.05 mg/kg
Chlordane, trans- <0.05 mg/kg
Chlorfenapyr <0.05 mg/kg
Chlorpyrifos <0.05 mg/kg
Coumaphos <0.05 mg/kg
Cyfluthrin <0.05 mg/kg

* This analysis or component is not ISO accredited.

Certificate of Analysis

Elixinol, LLC

555 Burbank St. Unit J
Broomfield Colorado 80020 United States

Sample Name:	Hemp Balm #166144	Eurofins Sample:	8800807
Project ID	ELIXINOL-20190906-0082	Receipt Date	06-Sep-2019
PO Number	CVD	Receipt Condition	Ambient temperature
Lot Number	Hemp Balm #166144	Login Date	06-Sep-2019
Sample Serving Size		Date Started	06-Sep-2019
		Online Order	13484-12352C5A

Analysis

Result

Multi-Residue Analysis for hemp products - 60+ compounds

Cypermethrin	non-analyzable
Cyproconazole (2 diastereoisomers)	<0.05 mg/kg
Cyprodinil	<0.05 mg/kg
Dichlorvos	<0.05 mg/kg
Diclobutrazol	<0.05 mg/kg
Dipropetryn	<0.05 mg/kg
Disulfoton	<0.05 mg/kg
Endosulfan I (alpha-isomer)	<0.05 mg/kg
Endosulfan II (beta-isomer)	<0.05 mg/kg
Endosulfan sulfate	<0.05 mg/kg
Epoxiconazole	<0.05 mg/kg
Ethiofencarb	<0.05 mg/kg
Etofenprox	<0.05 mg/kg
Etoxazole	<0.05 mg/kg
Fenoxycarb	<0.05 mg/kg
Fenpropathrin	<0.05 mg/kg
Fenvalerate/Esfenvalerate (sum of isomers)	<0.05 mg/kg
Fipronil	<0.05 mg/kg
Fipronil desulfinyl	<0.05 mg/kg
Fipronil sulfone	<0.05 mg/kg
Imazalil	0.023 mg/kg
Imidacloprid	<0.05 mg/kg
Malathion	<0.05 mg/kg
Methiocarb	<0.05 mg/kg
Methiocarb sulfone	<0.05 mg/kg
Methiocarb sulfoxide	<0.05 mg/kg
Methomyl	<0.05 mg/kg
Mevinphos (E- and Z-isomers)	<0.05 mg/kg
Myclobutanil	<0.05 mg/kg
Naled (Dibrom)	<0.05 mg/kg
Paclbutrazol	<0.05 mg/kg
Permethrin (sum of isomers)	<0.05 mg/kg
Propoxur	<0.05 mg/kg
Spinetoram (spinosyns J and L)	<0.05 mg/kg

* This analysis or component is not ISO accredited.

Certificate of Analysis

Elixinol, LLC

555 Burbank St. Unit J
Broomfield Colorado 80020 United States

Sample Name:	Hemp Balm #166144	Eurofins Sample:	8800807
Project ID	ELIXINOL-20190906-0082	Receipt Date	06-Sep-2019
PO Number	CVD	Receipt Condition	Ambient temperature
Lot Number	Hemp Balm #166144	Login Date	06-Sep-2019
Sample Serving Size		Date Started	06-Sep-2019
		Online Order	13484-12352C5A

Analysis

Result

Multi-Residue Analysis for hemp products - 60+ compounds

Spinosad (spinosyns A and D)	<0.05 mg/kg
Spirodiclofen	<0.05 mg/kg
Spiromesifen	<0.05 mg/kg
Spiromesifen enol	non-analyzable
Spirotetramat	<0.05 mg/kg
Spiroxamine (2 diastereoisomers)	<0.05 mg/kg
Tebuconazole	<0.05 mg/kg
Thiabendazole	<0.05 mg/kg
Thiabendazole-5-hydroxy-	<0.05 mg/kg
Thiacloprid	<0.05 mg/kg
Trifloxystrobin	<0.05 mg/kg
Metolachlor	<0.05 mg/kg
Pyrethrum (total)	<0.50 mg/kg

Method References

Testing Location

Enterobacteriaceae (Bile-Tolerant Gram-Negative Bacteria) (USPN2021)

Food Integ. Innovation-Madison NE

USP Current revision, Chapter 2021.

To satisfy the requirements of the USP, the Preparatory Test must be completed on each matrix.

**Based on the results of the preparatory test, the detection limit stipulated is adequate for the enumeration of the specified microorganisms.

Metals Analysis by ICP-MS (ICP_MS_B_S)

Food Integrity Innovation-Boulder

Methods for the Determination of Metals in Environmental Standards - Supplement 1, EPA-600/R-94-111, May 1994.

"Determination of Metals and Trace Elements in Water and Wastes by Inductively Coupled Plasma-Mass Spectrometry", USEPA Method 200.8, Revision 5.1, EMMC Version.

* This analysis or component is not ISO accredited.

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Page 3 of 5

Certificate of Analysis

Elixinol, LLC

555 Burbank St. Unit J
Broomfield Colorado 80020 United States

Method References

Testing Location

Multi-Residue Analysis for hemp products - 60+ compounds (PEST_HEMP)

Food Integ. Innovation-Greenfield

Official Methods of Analysis, AOAC Official Method 2007.01, Pesticide Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate, AOAC INTERNATIONAL (modified).

CEN Standard Method EN 15662: Food of plant origin - Determination of pesticide residues using GC-MS and/or LC-MS/MS following acetonitrile extraction/partitioning and clean-up by dispersive SPE - QuEChERS method.

List of the tested pesticides and their limits of quantification (LOQs) are available upon request.

Mycotoxins in Raw Materials (MYCO_REG_S)

Food Integrity Innovation-Madison

Varga, E., Glauner, T., Koppen, R., Mayer, K., Sulyok, M., Schumacher, R., Krska, R. and Berthiller, F., "Stable isotope dilution assay for the accurate determination of mycotoxins in maize by UHPLC-MS/MS," *Analytical and BioAnalytical Chemistry*, 402:2675-2686 (2012).

Preparatory Testing of Nutritional and Dietary Supplements (USPN_PT)

Food Integ. Innovation-Madison NE

Certificate of Analysis

Elixinol, LLC

555 Burbank St. Unit J
Broomfield Colorado 80020 United States

Testing Location(s)

Released on Behalf of Eurofins by

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2918.06

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2918.01

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