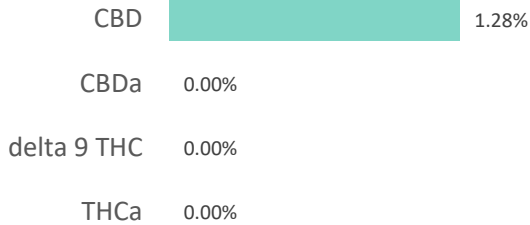
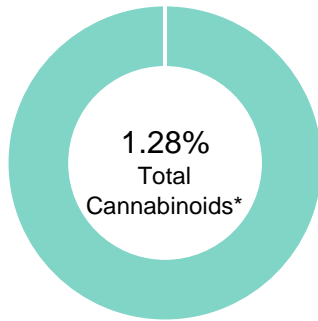


960026

Batch ID:	960026	Test ID:	9515882.0010
Reported:	17-Jul-2019	Method:	TM14
Type:	Concentrate		
Test:	Potency		

CANNABINOID PROFILE


Compound	LOQ (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.08	0.00	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.04	0.00	0.0
Cannabidiolic acid (CBDA)	0.09	0.00	0.0
Cannabidiol (CBD)	0.05	1.28	12.8
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.04	0.00	0.0
Cannabinolic Acid (CBNA)	0.10	0.00	0.0
Cannabinol (CBN)	0.05	0.00	0.0
Cannabigerolic acid (CBGA)	0.07	0.00	0.0
Cannabigerol (CBG)	0.04	0.00	0.0
Tetrahydrocannabivarinic Acid (THCVA)	0.06	0.00	0.0
Tetrahydrocannabivarin (THCV)	0.03	0.00	0.0
Cannabidivarinic Acid (CBDVA)	0.08	0.00	0.0
Cannabidivarin (CBDV)	0.04	0.00	0.0
Cannabichromenic Acid (CBCA)	0.06	0.00	0.0
Cannabichromene (CBC)	0.07	0.00	0.0
Total Cannabinoids		1.28	12.80
Total Potential THC**		0.00	0.00
Total Potential CBD**		1.28	12.80

 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
 17-Jul-2019
 2:41 PM

PREPARED BY / DATE



Greg Zimpfer
 17-Jul-2019
 2:45 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



960026

Batch ID:	N/A	Test ID:	3101377.007
Reported:	8-Jul-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

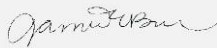

** Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form.

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

FINAL APPROVAL


Jamie Bunker
8-Jul-2019
5:38 PM
Greg Zimpfer
8-Jul-2019
5:44 PM

PREPARED BY / DATE

APPROVED BY / DATE

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Certificate of Analysis

Elixinol, LLC

638 S Taylor Street
Louisville Colorado 80027 United States

Sample Name:	960026 Retest	Eurofins Sample:	9038128
Project ID	ELIXINOL-20191120-0122	Receipt Date	20-Nov-2019
PO Number	CVD	Receipt Condition	Ambient temperature
Lot Number	960026 Retest	Login Date	20-Nov-2019
Sample Serving Size		Date Started	26-Nov-2019
		Online Order	13484-12982FA3

Analysis

Result

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

Method References

Testing Location

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).

Testing Location(s)

Released on Behalf of Eurofins by

Food Integrity Innovation-Madison

Edward Ladwig - Director

Eurofins Food Chemistry Testing US, Inc.
3301 Kinsman Blvd
Madison WI 53704
800-675-8375



2918.01

These results apply to the sample as received and only to the items tested. This certificate of analysis shall not be reproduced, except in its entirety, without the written approval of Eurofins.

Certificate of Analysis

Elixinol, LLC

555 Burbank St. Unit J
Broomfield Colorado 80020 United States

Sample Name:	960026	Eurofins Sample:	8612755
Project ID	ELIXINOL-20190708-0053	Receipt Date	13-Jun-2019
PO Number	CVD	Receipt Condition	Ambient temperature
Lot Number	960026	Login Date	13-Jun-2019
Sample Serving Size		Date Started	13-Jun-2019
		Online Order	13484-11E5F813

Analysis	Result
Metals Analysis by ICP-MS	
Arsenic	<70.7 ppb
Cadmium	<17.7 ppb
Lead	<17.7 ppb
Mercury	<8.84 ppb
Glyphosate and AMPA *	
Glyphosate	<100 ng/g
AMPA	<100 ng/g
Multi-Residue Analysis for hemp products - 60+ compounds	
Matrix Type - To Determine Limit of Quantification (LOQ)	High-Fat Food Matrices
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
Cypermethrin	<0.05 mg/kg
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

* 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:	960026	Eurofins Sample:	8612755
Project ID	ELIXINOL-20190708-0053	Receipt Date	13-Jun-2019
PO Number	CVD	Receipt Condition	Ambient temperature
Lot Number	960026	Login Date	13-Jun-2019
Sample Serving Size		Date Started	13-Jun-2019
		Online Order	13484-11E5F813

Analysis

Result

Multi-Residue Analysis for hemp products - 60+ compounds

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	<0.05 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
Paclobutrazol	<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
Spinosad (spinosyns A and D)	<0.05 mg/kg
Spirodiclofen	<0.05 mg/kg
Spiromesifen	<0.05 mg/kg
Spiromesifen enol	<0.05 mg/kg
Spirotetramat	<0.05 mg/kg
Spiroxamine (2 diastereoisomers)	<0.05 mg/kg
Tebuconazole	<0.05 mg/kg
Thiabendazole	<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:	960026	Eurofins Sample:	8612755
Project ID	ELIXINOL-20190708-0053	Receipt Date	13-Jun-2019
PO Number	CVD	Receipt Condition	Ambient temperature
Lot Number	960026	Login Date	13-Jun-2019
Sample Serving Size		Date Started	13-Jun-2019
		Online Order	13484-11E5F813

Analysis

Result

Multi-Residue Analysis for hemp products - 60+ compounds

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

Glyphosate and AMPA (GLY_AMP_A_S)

Food Integ. Innovation-Greenfield

Monsanto Company Method ME-1466-02, "High Throughput Assay for Glyphosate and AMPA in Raw Agricultural Commodities and Processed Fractions Using LC/MS/MS".

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.

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.

Certificate of Analysis

Elixinol, LLC

555 Burbank St. Unit J
Broomfield Colorado 80020 United States

Testing Location(s)

Released on Behalf of Eurofins by

Food Integrity Innovation-Boulder

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Ian Laessig - Manager



AT-1816

Food Integ. Innovation-Greenfield

Eurofins Food Chemistry Testing US, Inc.
671 S. Meridian Road
Greenfield IN 46140
800-675-8375

Karelyn Koehn - Manager



2918.06

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Certificate of Analysis

Elixinol, LLC

555 Burbank St. Unit J
Broomfield Colorado 80020 United States

Sample Name:	960026	Eurofins Sample:	8544235
Project ID	ELIXINOL-20190618-0042	Receipt Date	24-Jun-2019
PO Number		Login Date	18-Jun-2019
Lot Number	960026	Date Started	24-Jun-2019
Sample Serving Size		Online Order	13484-11CB9A91

Analysis	Result
----------	--------

Elements by ICP Mass Spectrometry

Arsenic	<10.0 ppb
Cadmium	<5.00 ppb
Lead	<5.00 ppb
Mercury	<5.00 ppb

Analysis	LOQ	Limit	Result	Pass/Fail
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Residual Solvents - Class 1, 2a, 2b and 3 *

1,1,1-Trichloroethane	10 ppm	10 ppm	<10 ppm	Pass
1,1-Dichloroethene	8 ppm	8 ppm	<8 ppm	Pass
1,2-Dichloroethane	5 ppm	5 ppm	<5 ppm	Pass
Benzene	2 ppm	2 ppm	<2 ppm	Pass
Carbon Tetrachloride	4 ppm	4 ppm	<4 ppm	Pass
1,2-Dimethoxyethane	100 ppm	100 ppm	<100 ppm	Pass
1,4-Dioxane	380 ppm	380 ppm	<380 ppm	Pass
Acetonitrile	410 ppm	410 ppm	<410 ppm	Pass
Chlorobenzene	360 ppm	360 ppm	<360 ppm	Pass
Chloroform	60 ppm	60 ppm	<60 ppm	Pass
1,2-Dichloroethene	1870 ppm	1870 ppm	<1870 ppm	Pass
Cumene	70 ppm	70 ppm	<70.0 ppm	Pass
Cyclohexane	3880 ppm	3880 ppm	<3880 ppm	Pass
Methanol	3000 ppm	3000 ppm	<3000 ppm	Pass
Methylbutylketone	50 ppm	50 ppm	<50 ppm	Pass
Methylcyclohexane	1180 ppm	1180 ppm	<1180 ppm	Pass
Methylene Chloride	600 ppm	600 ppm	<600 ppm	Pass
n-Hexane	290 ppm	290 ppm	<290 ppm	Pass
Nitromethane	50 ppm	50 ppm	<50 ppm	Pass
Pyridine	200 ppm	200 ppm	<200 ppm	Pass
Tetrahydrofuran	720 ppm	720 ppm	<720 ppm	Pass
Tetralin	96 ppm	96 ppm	<96.0 ppm	Pass
Toluene	890 ppm	890 ppm	<890 ppm	Pass
Trichloroethylene	80 ppm	80 ppm	<80 ppm	Pass
Xylenes(O,M,P + EB)	2170 ppm	2170 ppm	<2170 ppm	Pass

* 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:	960026	Eurofins Sample:	8544235
Project ID	ELIXINOL-20190618-0042	Receipt Date	24-Jun-2019
PO Number		Login Date	18-Jun-2019
Lot Number	960026	Date Started	24-Jun-2019
Sample Serving Size		Online Order	13484-11CB9A91

Analysis	LOQ	Limit	Result	Pass/Fail
Residual Solvents - Class 1, 2a, 2b and 3 *				
1-Butanol	200 ppm	5000 ppm	<200 ppm	Pass
1-Pentanol	200 ppm	5000 ppm	<200 ppm	Pass
1-Propanol	200 ppm	5000 ppm	<200 ppm	Pass
2-Butanol	200 ppm	5000 ppm	<200 ppm	Pass
Methylethylketone	200 ppm	5000 ppm	<200 ppm	Pass
3-Methyl-1-butanol	200 ppm	5000 ppm	<200 ppm	Pass
Acetic Acid Butyl Ester	200 ppm	5000 ppm	<200 ppm	Pass
Acetone	200 ppm	5000 ppm	<200 ppm	Pass
Anisole	200 ppm	5000 ppm	<200 ppm	Pass
Diethyl Ether	200 ppm	5000 ppm	<200 ppm	Pass
Ethanol	200 ppm	5000 ppm	>8000 ppm	Fail
Ethyl Acetate	200 ppm	5000 ppm	<200 ppm	Pass
Ethyl Formate	500 ppm	5000 ppm	<500 ppm	Pass
2-Methyl-1-propanol	200 ppm	5000 ppm	<200 ppm	Pass
Isobutyl Acetate	200 ppm	5000 ppm	<200 ppm	Pass
2-Propanol	200 ppm	5000 ppm	<200 ppm	Pass
Isopropyl Acetate	200 ppm	5000 ppm	<200 ppm	Pass
Methyl Acetate	200 ppm	5000 ppm	<200 ppm	Pass
Methylisobutylketone	200 ppm	5000 ppm	<200 ppm	Pass
tert-Butylmethyl Ether	200 ppm	5000 ppm	<200 ppm	Pass
n-Heptane	200 ppm	5000 ppm	<200 ppm	Pass
n-Pentane	200 ppm	5000 ppm	<200 ppm	Pass
Propyl Acetate	200 ppm	5000 ppm	<200 ppm	Pass
Total Class 3 Residual Solvents	5000 ppm	5000 ppm	>5000 ppm	Fail

Method References

Testing Location

Elements by ICP Mass Spectrometry (ICP_MS_S)

Food Integrity Innovation-Madison

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Printed: 03-Jul-2019 1:32 am

Page 2 of 3

Certificate of Analysis

Elixinol, LLC

555 Burbank St. Unit J
Broomfield Colorado 80020 United States

Method References

Testing Location

Elements by ICP Mass Spectrometry (ICP_MS_S)

Food Integrity Innovation-Madison

Official Methods of Analysis, Method 2011.19 and 993.14, AOAC INTERNATIONAL, (Modified).
Pequette, L.H., Szabo, A., Thompson, J.J., "Simultaneous Determination of Chromium, Selenium, and Molybdenum in Nutritional Products by Inductively Coupled Plasma/Mass Spectrometry: Single-Laboratory Validation," Journal of AOAC International, 94(4): 1240 - 1252 (2011).

Residual Solvents - Class 1, 2a, 2b and 3 (USPR_S)

Food Integrity Innovation-Madison

United States Pharmacopeia, 38nd Rev. - National Formulary 33th Ed., Method <467>, USP Convention, Inc., Rockville, MD (2015). (Modified).

Testing Location(s)

Released on Behalf of Eurofins by

Food Integrity Innovation-Madison

Edward Ladwig - Director

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800-675-8375



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