

CERTIFICATE OF ANALYSIS

 Prepared for:
Elixinol LLC

 10170 Church Ranch Way, Ste 400
 Westminster, CO USA 80021

500mg Natural Tincture - 220118

Batch ID or Lot Number: 220118	Test: Potency	Reported: 27Jun2022	USDA License: N/A
Matrix: Solution	Test ID: T000211365	Started: 23Jun2022	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD): Potency – Standard Cannabinoid Analysis	Received: 22Jun2022	Status: Active

Cannabinoids

	LOD (mg/mL)	LOQ (mg/mL)	Result (mg/mL)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.067	0.208	0.489	0.52	Density = 0.94172g/mL
Cannabichromenic Acid (CBCA)	0.061	0.190	ND	ND	
Cannabidiol (CBD)	0.172	0.543	18.749	19.91	
Cannabidiolic Acid (CBDA)	0.176	0.556	ND	ND	
Cannabidivarin (CBDV)	0.041	0.128	0.324	0.34	
Cannabidivarinic Acid (CBDVA)	0.073	0.232	ND	ND	
Cannabigerol (CBG)	0.038	0.118	0.182	0.19	
Cannabigerolic Acid (CBGA)	0.158	0.493	ND	ND	
Cannabinol (CBN)	0.049	0.154	ND	ND	
Cannabinolic Acid (CBNA)	0.108	0.336	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.189	0.587	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.171	0.533	0.895	0.95	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.152	0.473	ND	ND	
Tetrahydrocannabivarin (THCV)	0.034	0.107	0.111	0.12	
Tetrahydrocannabivarinic Acid (THCVA)	0.134	0.417	ND	ND	
Total Cannabinoids			20.750	22.03	
Total Potential THC			0.895	0.95	
Total Potential CBD			18.749	19.91	

Final Approval


 Daniel Weidensaul
 28Jun2022
 06:09:00 PM MDT



 Jacob Miller
 28Jun2022
 06:11:00 PM MDT


PREPARED BY / DATE

APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/5543ac19-9c8b-40b9-9bdf-05f5a6a54069>
Definitions

% = % (w/w) = Percent (weight of analyte / weight of product). ND = None Detected (defined by dynamic range of the method).
 Total Potential Delta 9-THC or CBD is calculated to take into account the loss of a carboxyl group during decarboxylation step, using the following formulas: Total Potential Delta 9-THC = Delta 9-THC + (Delta 9-THCa *(0.877)) and Total CBD = CBD + (CBDA *(0.877)).

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 17025:2017 Accredited by A2LA.



Cert #4329.02

 CDPHE Certified
 5543ac199c8b40b99bdf05f5a6a54069.1

CERTIFICATE OF ANALYSIS

Prepared for:
Elixinol LLC

10170 Church Ranch Way, Ste 400
Westminster, CO USA 80021

500mg Natural Tincture - 220118

Batch ID or Lot Number: 220118	Test: Residual Solvents	Reported: 23Jun2022	USDA License: N/A
Matrix: Concentrate	Test ID: T000211369	Started: 23Jun2022	Sampler ID: N/A
	Method(s): TM04 (GC-MS): Residual Solvents	Received: 22Jun2022	Status: Active

Residual Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	74 - 1484	ND	
Butanes (Isobutane, n-Butane)	116 - 2316	ND	
Methanol	43 - 864	ND	
Pentane	63 - 1270	ND	
Ethanol	68 - 1364	ND	
Acetone	71 - 1423	ND	
Isopropyl Alcohol	72 - 1445	ND	
Hexane	4 - 88	ND	
Ethyl Acetate	73 - 1451	ND	
Benzene	0.2 - 3.1	ND	
Heptanes	74 - 1478	ND	
Toluene	13 - 269	ND	
Xylenes (m,p,o-Xylenes)	99 - 1975	ND	

Final Approval



Jacob Miller
23Jun2022
04:24:00 PM MDT

PREPARED BY / DATE



Sam Smith
23Jun2022
04:29:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/7b225f0a-3aa8-41d7-998d-5cce445a8af9>

Definitions

ND = None Detected (defined by dynamic range of the method)
Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range

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Cert #4329.02

CDPHE Certified
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CERTIFICATE OF ANALYSIS

Prepared for:
Elixinol LLC10170 Church Ranch Way, Ste 400
Westminster, CO USA 80021**500mg Natural Tincture - 220118**

Batch ID or Lot Number: 220118	Test: Heavy Metals	Reported: 28Jun2022	USDA License: NA
Matrix: Unit Co	Test ID: T000211368	Started: 27Jun2022	Sampler ID: NA
	Method(s): TM19 (ICP-MS): Heavy Metals	Received: 22Jun2022	Status: NA

Heavy Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.08 - 7.90	ND	
Cadmium	0.08 - 7.87	ND	
Mercury	0.08 - 7.80	ND	
Lead	0.08 - 7.99	ND	

Final ApprovalDaniel Weidensaul
29Jun2022
08:05:00 PM MDT

PREPARED BY / DATE

Courtney Richards
29Jun2022
09:10:00 PM MDT

APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/a47522c3-602e-4e4b-9f1b-b5257921462f>**Definitions**ND = None Detected (defined by dynamic range of the method)
Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range

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Cert #4329.02

CDPHE Certified

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CERTIFICATE OF ANALYSIS

 Prepared for:
Elixinol LLC

 10170 Church Ranch Way, Ste 400
 Westminster, CO USA 80021

500mg Natural Tincture - 220118

Batch ID or Lot Number: 220118	Test: Microbial Contaminants	Reported: 27Jun2022	USDA License: N/A
Matrix: Finished Product	Test ID: T000211367	Started: 22Jun2022	Sampler ID: N/A
	Method(s): TM25 (qPCR) TM24, TM26, TM27 (Culture Plating): Microbial (Colorado Panel)	Received: 22Jun2022	Status: Active

Microbial
Contaminants

	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 ² CFU/g	1.0x10 ³ - 1.5x10 ⁵	None Detected	
Total Coliforms*	TM27: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	

Final Approval


 Carly Bader
 25Jun2022
 12:48:00 PM MDT



 Eden Thompson-Wright
 27Jun2022
 09:17:00 AM MDT


PREPARED BY / DATE

APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/12647328-38c8-4da1-a789-64f3435d13cd>
Definitions

* Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form. Examples: 10² = 100 CFU, 10³ = 1,000 CFU, 10⁴ = 10,000 CFU, 10⁵ = 100,000 CFU
 CFU/g = Colony Forming Units per Gram, LOD = Limit of Detection
 ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation
 STEC = Shiga Toxin-Producing E. coli

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Cert #4329.02

CDPHE Certified

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Prepared for:
Elixinol LLC

10170 Church Ranch Way, Ste 400
Westminster, CO USA 80021

500mg Natural Tincture - 220118

Batch ID or Lot Number: 220118	Test: Pesticides	Reported: 28Jun2022	USDA License: NA
Matrix: Concentrate	Test ID: T000211366	Started: 27Jun2022	Sampler ID: NA
	Method(s): TM17 (LC-QQ LC MS/MS)	Received: 22Jun2022	Status: NA

Pesticides	Dynamic Range (ppb)	Result (ppb)	Pesticides	Dynamic Range (ppb)	Result (ppb)
Abamectin	338 - 2613	ND	Malathion	285 - 2711	ND
Acephate	36 - 2798	ND	Metalaxyl	48 - 2710	ND
Acetamiprid	44 - 2766	ND	Methiocarb	41 - 2770	ND
Azoxystrobin	49 - 2726	ND	Methomyl	42 - 2759	ND
Bifenazate	48 - 2719	ND	MGK 264 1	144 - 1643	ND
Boscalid	62 - 2708	ND	MGK 264 2	116 - 1152	ND
Carbaryl	40 - 2787	ND	Myclobutanil	48 - 2742	ND
Carbofuran	47 - 2720	ND	Naled	45 - 2712	ND
Chlorantraniliprole	43 - 2797	ND	Oxamyl	45 - 2776	ND
Chlorpyrifos	38 - 2854	ND	Pacllobutrazol	49 - 2705	ND
Clofentezine	296 - 2749	ND	Permethrin	290 - 2808	ND
Diazinon	282 - 2742	ND	Phosmet	44 - 2728	ND
Dichlorvos	287 - 2780	ND	Prophos	263 - 2762	ND
Dimethoate	46 - 2740	ND	Propoxur	48 - 2735	ND
E-Fenpyroximate	240 - 2759	ND	Pyridaben	266 - 2802	ND
Etofenprox	44 - 2761	ND	Spinosad A	41 - 2198	ND
Etoxazole	280 - 2727	ND	Spinosad D	49 - 494	ND
Fenoxycarb	46 - 2733	ND	Spiromesifen	236 - 2767	ND
Fipronil	34 - 2841	ND	Spirotetramat	280 - 2691	ND
Flonicamid	45 - 2744	ND	Spiroxamine 1	20 - 1173	ND
Fludioxonil	260 - 2691	ND	Spiroxamine 2	25 - 1552	ND
Hexythiazox	49 - 2751	ND	Tebuconazole	287 - 2746	ND
Imazalil	282 - 2720	ND	Thiacloprid	44 - 2743	ND
Imidacloprid	46 - 2783	ND	Thiamethoxam	40 - 2778	ND
Kresoxim-methyl	47 - 2724	ND	Trifloxystrobin	48 - 2713	ND

Final Approval



Daniel Weidensaul
28Jun2022
08:49:00 PM MDT

PREPARED BY / DATE



Courtney Richards
28Jun2022
12:00:00 AM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/40dd8d97-058e-488d-b36b-575055c132cb>

Definitions

ND = None Detected (defined by dynamic range of the method)
Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range
ppb = Parts Per Billion

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 17025:2017 Accredited by A2LA.



Cert #4329.02

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500mg Natural Tincture - 220118

Batch ID:	220118	Test ID:	T000211371
Type:	Concentrate	Submitted:	06/22/2022 @ 09:02 AM
Test:	Mycotoxins	Started:	4/6/2021
Method:	TM18 (UHPLC-QQQ LC MS/MS)	Reported:	6/23/2022

MYCOTOXIN DETERMINATION

Compound	Dynamic Range (ppb)	Result (ppb)	Specification (ppb)	Status
Ochratoxin A	4.9 - 130.8	ND	20	Pass
Aflatoxin B1	1 - 32.7	ND	N/A	N/A
Aflatoxin B2	1.1 - 32.6	ND	N/A	N/A
Aflatoxin G1	1 - 33	ND	N/A	N/A
Aflatoxin G2	1 - 33.2	ND	N/A	N/A
Total Aflatoxins (B1, B2, G1, and G2)		ND	20	Pass

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

NOTES

N/A

FINAL APPROVAL

 PREPARED BY / DATE	Sam Smith 23-Jun-2022 4:29 PM	 APPROVED BY / DATE	Jacob Miller 23-Jun-2022 4:36 PM	Pass FINAL STATUS
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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.

Certificate of Analysis

Elixinol, LLC

10170 Church Ranch
Westminster Colorado 80021

Sample Name:	500mg Natural Tincture - 220118	Eurofins Sample:	11875360
Project ID	ELIXINOL-20220621-0021	Receipt Date	24-Jun-2022
PO Number		Receipt Condition	Ambient temperature
Lot Number	220118	Login Date	21-Jun-2022
Sample Serving Size	1 mL	Date Started	24-Jun-2022
		Sampled	Sample results apply as received
		Online Order	13484-17748FF8

Analysis

Result

Enterobacteriaceae Plate Count *

Enterobacteriaceae

<10 CFU/g

Glyphosate and AMPA

Glyphosate

<100 ng/g

AMPA

<100 ng/g

Method References

Testing Location

Enterobacteriaceae Plate Count (EBPC)

EML New Berlin

2345 S 170th St New Berlin, WI 53151 USA

Compendium of Methods for the Microbiological Examination of Foods: Enterobacteriaceae, Coliforms, and Escherichia coli as Quality and Safety Indicators, Chapter 8, 4th Edition, 2001.

Glyphosate and AMPA (GLY_AMPAS)

Food Integrity Innovation-Madison

6304 Ronald Reagan Ave Madison, WI 53704 USA

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

Testing Location(s)

Released on Behalf of Eurofins by

Food Integrity Innovation-Madison

Edward Ladwig - President Eurofins Food Chemistry Testing Madison

Eurofins Food Chemistry Testing Madison, Inc.
6304 Ronald Reagan Ave
Madison WI 53704
800-675-8375



2918.01

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* This analysis or component is not ISO accredited.

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