

CERTIFICATE OF ANALYSIS

Prepared for:
Elixinol LLC

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

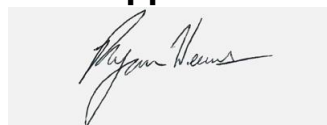
5000 Natural Tincture - VH22-006

Batch ID or Lot Number: VH22-006	Test: Potency	Reported: 12May2022	USDA License: N/A
Matrix: Solution	Test ID: T000206160	Started: 10May2022	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD): Potency – Standard Cannabinoid Analysis	Received: 09May2022	Status: Active

Cannabinoids

	LOD (mg/mL)	LOQ (mg/mL)	Result (mg/mL)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.071	0.207	2.276	2.40	Density = 0.948876g/mL
Cannabichromenic Acid (CBCA)	0.065	0.189	ND	ND	
Cannabidiol (CBD)	0.163	0.536	49.795	52.48	
Cannabidiolic Acid (CBDA)	0.167	0.549	ND	ND	
Cannabidivarin (CBDV)	0.039	0.127	0.674	0.71	
Cannabidivarinic Acid (CBDVA)	0.070	0.229	ND	ND	
Cannabigerol (CBG)	0.040	0.117	1.494	1.57	
Cannabigerolic Acid (CBGA)	0.168	0.491	ND	ND	
Cannabinol (CBN)	0.052	0.153	<LOQ	0.10	
Cannabinolic Acid (CBNA)	0.115	0.335	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.200	0.585	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.182	0.531	2.169	2.29	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.161	0.470	ND	ND	
Tetrahydrocannabivarin (THCV)	0.037	0.107	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.142	0.415	ND	ND	
Total Cannabinoids			56.506	59.55	
Total Potential THC			2.169	2.29	
Total Potential CBD			49.795	52.48	

Final Approval



Ryan Weems
12May2022
04:17:00 PM MDT

PREPARED BY / DATE



Jacob Miller
12May2022
04:22:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/2cab88cf-57b1-4b77-a823-188d9ecbde76>

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)).

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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

5000 Natural Tincture - VH22-006

Batch ID or Lot Number: VH22-006	Test: Residual Solvents	Reported: 11May2022	USDA License: N/A
Matrix: Concentrate	Test ID: T000206164	Started: 10May2022	Sampler ID: N/A
	Method(s): TM04 (GC-MS): Residual Solvents	Received: 09May2022	Status: Active

Residual Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	60 - 1195	ND	
Butanes (Isobutane, n-Butane)	117 - 2338	ND	
Methanol	46 - 915	ND	
Pentane	64 - 1273	ND	
Ethanol	64 - 1285	ND	
Acetone	73 - 1452	ND	
Isopropyl Alcohol	74 - 1481	ND	
Hexane	4 - 88	ND	
Ethyl Acetate	73 - 1464	ND	
Benzene	0.2 - 3.0	ND	
Heptanes	73 - 1455	ND	
Toluene	13 - 263	ND	
Xylenes (m,p,o-Xylenes)	95 - 1908	ND	

Final Approval



Jacob Miller
11May2022
04:39:00 PM MDT

PREPARED BY / DATE



Hannah Wright
11May2022
04:47:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/f8ec2c90-c77d-4602-9b72-7529e65061ba>

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

5000 Natural Tincture - VH22-006

Batch ID or Lot Number: VH22-006	Test: Heavy Metals	Reported: 12May2022	USDA License: NA
Matrix: Unit Co	Test ID: T000206163	Started: 11May2022	Sampler ID: NA
	Method(s): TM19 (ICP-MS): Heavy Metals	Received: 09May2022	Status: NA

Heavy Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.05 - 4.62	ND	
Cadmium	0.05 - 4.65	ND	
Mercury	0.04 - 4.28	ND	
Lead	0.03 - 3.28	ND	

Final Approval



Kayla Phye
12May2022
02:52:00 PM MDT

PREPARED BY / DATE



Sam Smith
12May2022
02:56:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/0b74bfff-53e9-430b-a258-4b5e80853de3>

Definitions

ND = None Detected (defined by dynamic range of the method)
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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

5000 Natural Tincture - VH22-006

Batch ID or Lot Number: VH22-006	Test: Microbial Contaminants	Reported: 12May2022	USDA License: N/A
Matrix: Finished Product	Test ID: T000206162	Started: 09May2022	Sampler ID: N/A
	Method(s): TM25 (qPCR) TM24, TM26, TM27 (Culture Plating): Microbial (Colorado Panel)	Received: 09May2022	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


 Brett Hudson
 12May2022
 12:03:00 PM MDT



 Carly Bader
 12May2022
 03:24:00 PM MDT


PREPARED BY / DATE

APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/2d9d9702-c62d-4e39-9deb-05289ef24b83>
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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Prepared for:
Elixinol LLC

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

5000 Natural Tincture - VH22-006

Batch ID or Lot Number: VH22-006	Test: Pesticides	Reported: 12May2022	USDA License: NA
Matrix: Concentrate	Test ID: T000206161	Started: 10May2022	Sampler ID: NA
	Method(s): TM17 (LC-QQ LC MS/MS)	Received: 09May2022	Status: NA

Pesticides	Dynamic Range (ppb)	Result (ppb)	Pesticides	Dynamic Range (ppb)	Result (ppb)
Abamectin	262 - 2803	ND	Malathion	295 - 2716	ND
Acephate	40 - 2774	ND	Metalaxyl	44 - 2747	ND
Acetamiprid	40 - 2750	ND	Methiocarb	42 - 2784	ND
Azoxystrobin	46 - 2733	ND	Methomyl	40 - 2754	ND
Bifenazate	44 - 2768	ND	MGK 264 1	172 - 1642	ND
Boscalid	49 - 2825	ND	MGK 264 2	116 - 1125	ND
Carbaryl	42 - 2730	ND	Myclobutanil	48 - 2839	ND
Carbofuran	44 - 2708	ND	Naled	49 - 2767	ND
Chlorantraniliprole	50 - 2794	ND	Oxamyl	40 - 2763	ND
Chlorpyrifos	42 - 2806	ND	Pacllobutrazol	42 - 2729	ND
Clofentezine	280 - 2751	ND	Permethrin	289 - 2752	ND
Diazinon	295 - 2773	ND	Phosmet	46 - 2774	ND
Dichlorvos	280 - 2747	ND	Prophos	288 - 2780	ND
Dimethoate	42 - 2738	ND	Propoxur	44 - 2720	ND
E-Fenpyroximate	290 - 2748	ND	Pyridaben	275 - 2783	ND
Etofenprox	43 - 2756	ND	Spinosad A	36 - 2251	ND
Etoxazole	288 - 2744	ND	Spinosad D	48 - 510	ND
Fenoxycarb	43 - 2750	ND	Spiromesifen	267 - 2787	ND
Fipronil	39 - 2701	ND	Spirotetramat	292 - 2679	ND
Flonicamid	49 - 2737	ND	Spiroxamine 1	19 - 1198	ND
Fludioxonil	294 - 2770	ND	Spiroxamine 2	24 - 1555	ND
Hexythiazox	45 - 2754	ND	Tebuconazole	291 - 2779	ND
Imazalil	289 - 2784	ND	Thiacloprid	41 - 2746	ND
Imidacloprid	44 - 2763	ND	Thiamethoxam	42 - 2757	ND
Kresoxim-methyl	56 - 2820	ND	Trifloxystrobin	44 - 2738	ND

Final Approval



Daniel Weidensaul
12May2022
02:01:00 PM MDT

PREPARED BY / DATE



Sam Smith
12May2022
02:08:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/9e544a65-ecda-4977-bd6e-0b79f2b24bcd>

Definitions

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Dynamic Range = Limit of Quantitation (LOQ) through Upper Limit of Method Range
ppb = Parts Per Billion

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CERTIFICATE OF ANALYSIS

Prepared for:
Elixinol LLC

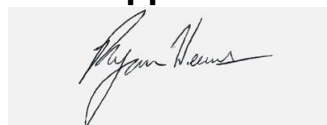
10170 Church Ranch Way, Ste 400
Westminster, CO USA 80021

5000 Natural Tincture - VH22-006

Batch ID or Lot Number: VH22-006	Test: Mycotoxins	Reported: 11May2022	USDA License: N/A
Matrix: Concentrate	Test ID: T000206166	Started: 10May2022	Sampler ID: N/A
	Method(s): TM18 (UHPLC-QQQ LCMS/MS): Mycotoxins	Received: 09May2022	Status: Active

Mycotoxins	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	3.23 - 126.37	ND	N/A
Aflatoxin B1	1.36 - 32.73	ND	
Aflatoxin B2	1.48 - 32.73	ND	
Aflatoxin G1	1.45 - 32.34	ND	
Aflatoxin G2	1.58 - 32.41	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

Final Approval



Ryan Weems
11May2022
02:21:00 PM MDT

PREPARED BY / DATE



Sam Smith
11May2022
02:24:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/d8a114da-0358-45a8-acfb-9bac2cdc26a0>

Definitions

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Cert #4329.02

CDPHE Certified

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Certificate of Analysis

Elixinol, LLC

10170 Church Ranch
Westminster Colorado 80021

Sample Name:	5000 Natural Tincture - VH22-006	Eurofins Sample:	11725379
Project ID	ELIXINOL-20220505-0016	Receipt Date	09-May-2022
PO Number	NA	Receipt Condition	Ambient temperature
Lot Number	VH22-006	Login Date	05-May-2022
Sample Serving Size	1 mL	Date Started	11-May-2022
		Sampled	Sample results apply as received
		Online Order	13484-1736D6D2

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

These results apply only to the items tested. This certificate of analysis shall not be reproduced, except in its entirety, without the written approval of Eurofins. Measurement uncertainty for individual analyses can be obtained upon request.

* This analysis or component is not ISO accredited.

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