

CERTIFICATE OF ANALYSIS

Prepared for:
Elixinol LLC

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

Cinnamint 4000mg Tincture - 220116

Batch ID or Lot Number: 220116	Test: Potency	Reported: 23Jun2022	USDA License: N/A
Matrix: Solution	Test ID: T000210951	Started: 22Jun2022	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD): Potency – Standard Cannabinoid Analysis	Received: 17Jun2022	Status: Active

Cannabinoids

	LOD (mg/mL)	LOQ (mg/mL)	Result (mg/mL)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.176	0.519	0.595	0.63	Density = 0.939644g/mL
Cannabichromenic Acid (CBCA)	0.161	0.474	ND	ND	
Cannabidiol (CBD)	0.430	1.326	39.696	42.25	
Cannabidiolic Acid (CBDA)	0.441	1.360	ND	ND	
Cannabidivarin (CBDV)	0.102	0.314	0.370	0.39	
Cannabidivarinic Acid (CBDVA)	0.184	0.567	ND	ND	
Cannabigerol (CBG)	0.100	0.294	0.327	0.35	
Cannabigerolic Acid (CBGA)	0.417	1.231	ND	ND	
Cannabinol (CBN)	0.130	0.384	ND	ND	
Cannabinolic Acid (CBNA)	0.285	0.840	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.497	1.466	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.452	1.332	1.199	1.28	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.400	1.180	ND	ND	
Tetrahydrocannabivarin (THCV)	0.091	0.268	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.353	1.041	ND	ND	
Total Cannabinoids			42.187	44.90	
Total Potential THC			1.199	1.28	
Total Potential CBD			39.696	42.25	

Final Approval



Daniel Weidensaul
23Jun2022
05:02:00 PM MDT

PREPARED BY / DATE



Karen Winternheimer
23Jun2022
05:07:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/ec5c8313-8425-441c-80de-5123a58bb15b>

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

Cinnamint 4000mg Tincture - 220116

Batch ID or Lot Number: 220116	Test: Residual Solvents	Reported: 21Jun2022	USDA License: N/A
Matrix: Concentrate	Test ID: T000210955	Started: 21Jun2022	Sampler ID: N/A
	Method(s): TM04 (GC-MS): Residual Solvents	Received: 17Jun2022	Status: Active

Residual Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	81 - 1620	ND	
Butanes (Isobutane, n-Butane)	124 - 2472	ND	
Methanol	49 - 977	ND	
Pentane	70 - 1396	ND	
Ethanol	72 - 1441	ND	
Acetone	79 - 1585	ND	
Isopropyl Alcohol	86 - 1726	ND	
Hexane	5 - 96	ND	
Ethyl Acetate	81 - 1618	ND	
Benzene	0.2 - 3.4	ND	
Heptanes	79 - 1590	ND	
Toluene	15 - 292	ND	
Xylenes (m,p,o-Xylenes)	107 - 2146	ND	

Final Approval



Jacob Miller
21Jun2022
03:50:00 PM MDT

PREPARED BY / DATE



Sam Smith
21Jun2022
03:56:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/5b2fe596-de3b-4c65-8010-29ade9e2f31d>

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

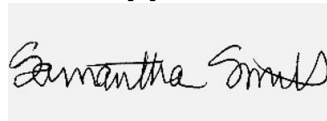
Prepared for:

Elixinol LLC10170 Church Ranch Way, Ste 400
Westminster, CO USA 80021**Cinnamint 4000mg Tincture - 220116**

Batch ID or Lot Number: 220116	Test: Heavy Metals	Reported: 23Jun2022	USDA License: NA
Matrix: Unit Co	Test ID: T000210954	Started: 23Jun2022	Sampler ID: NA
	Method(s): TM19 (ICP-MS): Heavy Metals	Received: 17Jun2022	Status: NA

Heavy Metals

	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.08 - 7.89	ND	
Cadmium	0.08 - 7.93	ND	
Mercury	0.08 - 7.81	ND	
Lead	0.08 - 8.18	ND	

Final ApprovalSam Smith
23Jun2022
05:02:00 PM MDT

PREPARED BY / DATE

Daniel Weidensaul
23Jun2022
05:04:00 PM MDT

APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/44ceea0a-3986-4548-a9d5-7ce74d796eb8>**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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CDPHE Certified

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CERTIFICATE OF ANALYSIS

 Prepared for:
Elixinol LLC


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

Cinnamint 4000mg Tincture - 220116

Batch ID or Lot Number: 220116	Test: Microbial Contaminants	Reported: 21Jun2022	USDA License: N/A
Matrix: Finished Product	Test ID: T000210953	Started: 17Jun2022	Sampler ID: N/A
	Method(s): TM25 (qPCR) TM24, TM26, TM27 (Culture Plating): Microbial (Colorado Panel)	Received: 17Jun2022	Status: Active

Microbial
Contaminants

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


 Eden Thompson-Wright
 21Jun2022
 04:04:00 PM MDT



 Carly Bader
 21Jun2022
 05:11:00 PM MDT


PREPARED BY / DATE

APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/c13e439c-db5b-40ce-ac6c-0380812d7ec8>
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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CDPHE Certified

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Prepared for:
Elixinol LLC

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

Cinnamint 4000mg Tincture - 220116

Batch ID or Lot Number: 220116	Test: Pesticides	Reported: 22Jun2022	USDA License: NA
Matrix: Concentrate	Test ID: T000210952	Started: 21Jun2022	Sampler ID: NA
	Method(s): TM17 (LC-QQ LC MS/MS)	Received: 17Jun2022	Status: NA

Pesticides	Dynamic Range (ppb)	Result (ppb)	Pesticides	Dynamic Range (ppb)	Result (ppb)
Abamectin	263 - 2783	ND	Malathion	299 - 2719	ND
Acephate	40 - 2860	ND	Metalaxyl	46 - 2726	ND
Acetamiprid	39 - 2791	ND	Methiocarb	36 - 2754	ND
Azoxystrobin	41 - 2699	ND	Methomyl	39 - 2825	ND
Bifenazate	46 - 2691	ND	MGK 264 1	165 - 1658	ND
Boscalid	25 - 2752	ND	MGK 264 2	107 - 1142	ND
Carbaryl	39 - 2732	ND	Myclobutanil	22 - 2768	ND
Carbofuran	44 - 2720	ND	Naled	45 - 2734	ND
Chlorantraniliprole	46 - 2697	ND	Oxamyl	38 - 2825	ND
Chlorpyrifos	36 - 2758	ND	Paclbutrazol	62 - 2612	ND
Clofentezine	287 - 2699	ND	Permethrin	253 - 2786	ND
Diazinon	289 - 2732	ND	Phosmet	49 - 2701	ND
Dichlorvos	263 - 2840	ND	Prophos	254 - 2776	ND
Dimethoate	38 - 2795	ND	Propoxur	41 - 2705	ND
E-Fenpyroximate	308 - 2698	ND	Pyridaben	287 - 2730	ND
Etofenprox	35 - 2760	ND	Spinosad A	33 - 2228	ND
Etoxazole	293 - 2712	ND	Spinosad D	48 - 491	ND
Fenoxycarb	38 - 2695	ND	Spiromesifen	244 - 2771	ND
Fipronil	22 - 2770	ND	Spirotetramat	303 - 2712	ND
Flonicamid	54 - 2783	ND	Spiroxamine 1	15 - 1177	ND
Fludioxonil	278 - 2740	ND	Spiroxamine 2	20 - 1558	ND
Hexythiazox	34 - 2718	ND	Tebuconazole	365 - 2621	ND
Imazalil	277 - 2721	ND	Thiacloprid	41 - 2816	ND
Imidacloprid	38 - 2792	ND	Thiamethoxam	39 - 2797	ND
Kresoxim-methyl	47 - 2758	ND	Trifloxystrobin	43 - 2729	ND

Final Approval


 Sam Smith
 22Jun2022
 04:52:00 PM MDT


 Karen Winternheimer
 22Jun2022
 04:54:00 PM MDT



PREPARED BY / DATE

APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/c0d0f473-45f2-4e0e-bd5f-465de28177e6>

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

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Cert #4329.02
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Cinnamint 4000mg Tincture - 220116

Batch ID:	220116	Test ID:	T000210957
Type:	Concentrate	Submitted:	06/17/2022 @ 10:46 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	5.1 - 136.1	ND	20	Pass
Aflatoxin B1	1.1 - 34	ND	N/A	N/A
Aflatoxin B2	1.2 - 33.9	ND	N/A	N/A
Aflatoxin G1	1.1 - 34.4	ND	N/A	N/A
Aflatoxin G2	1.1 - 34.5	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:	Cinnamint 4000mg Tincture - 220116	Eurofins Sample:	11875923
Project ID	ELIXINOL-20220621-0022	Receipt Date	21-Jun-2022
PO Number	NA	Receipt Condition	Ambient temperature
Lot Number	220116	Login Date	21-Jun-2022
Sample Serving Size	1 mL	Date Started	23-Jun-2022
		Sampled	Sample results apply as received
		Number Composited	2
		Online Order	13484-176E1334

Analysis	Result
Enterobacteriaceae Plate Count *	
Enterobacteriaceae	<10 CFU/g
Glyphosate and AMPA	
Glyphosate	<100 ng/g
AMPA	<100 ng/g

Method References	Testing Location
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Enterobacteriaceae Plate Count (EBPC)	EML New Berlin 2345 S 170th St New Berlin, WI 53151 USA
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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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