

CERTIFICATE OF ANALYSIS


 Prepared for:
Elixinol LLC

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

Cinnamint Tincture 1000mg - Lot 220040

Batch ID or Lot Number: 220030	Test: Potency	Reported: 14Feb2022	USDA License: N/A
Matrix: Solution	Test ID: T000191193	Started: 10Feb2022	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD): Potency – Standard Cannabinoid Analysis (Colorado Panel)	Received: 08Feb2022	Status: N/A

Cannabinoids	LOD (mg/mL)	LOQ (mg/mL)	Result		Notes
			(mg/mL)	Result (mg/g)	
Cannabichromene (CBC)	0.052	0.169	0.621	0.66	
Cannabichromenic Acid (CBCA)	0.048	0.155	ND	ND	
Cannabidiol (CBD)	0.130	0.477	19.804	21.10	
Cannabidiolic Acid (CBDA)	0.134	0.489	0.641	0.68	
Cannabidivarin (CBDV)	0.031	0.113	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.056	0.204	ND	ND	
Cannabigerol (CBG)	0.030	0.096	0.342	0.36	
Cannabigerolic Acid (CBGA)	0.124	0.402	ND	ND	
Cannabinol (CBN)	0.039	0.125	0.048*	0.05*	
Cannabinolic Acid (CBNA)	0.085	0.274	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.148	0.479	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.134	0.435	0.768	0.82	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.119	0.385	ND	ND	
Tetrahydrocannabivarin (THCV)	0.027	0.087	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.105	0.340	ND	ND	
Total Cannabinoids			22.224	23.68	
Total Potential THC**			0.768	0.82	
Total Potential CBD**			20.366	21.70	

Final Approval


 Karen Winternheimer
 11Feb2022
 03:32:00 PM MST

PREPARED BY / DATE



 Daniel Weidensaul
 11Feb2022
 03:42:00 PM MST

APPROVED BY / DATE


<https://results.botanacor.com/api/v1/coas/uuid/c79097ed-2c88-4910-a82a-c063f157b2f4>

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 17025:2005 Accredited A2LA.



Cert #4329.02

CDPHE Certified

[c79097ed2c884910a82ac063f157b2f4.2](https://results.botanacor.com/api/v1/coas/uuid/c79097ed-2c88-4910-a82a-c063f157b2f4)

CERTIFICATE OF ANALYSIS

 Prepared for:
Elixinol LLC

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

Cinnamint Tincture 1000mg - Lot 220040

Batch ID or Lot Number: 220030	Test: Residual Solvents	Reported: 11Feb2022	USDA License: N/A
Matrix: Concentrate	Test ID: T000191197	Started: 10Feb2022	Sampler ID: N/A
	Method(s): TM04 (GC-MS): Residual Solvents	Received: 08Feb2022	Status: N/A

Residual Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	103 - 2064	ND	
Butanes (Isobutane, n-Butane)	209 - 4181	ND	
Methanol	59 - 1179	ND	
Pentane	100 - 2007	ND	
Ethanol	89 - 1774	ND	
Acetone	97 - 1946	ND	
Isopropyl Alcohol	98 - 1965	ND	
Hexane	6 - 125	ND	
Ethyl Acetate	98 - 1953	ND	
Benzene	0.2 - 4.0	ND	
Heptanes	98 - 1958	ND	
Toluene	18 - 356	ND	
Xylenes (m,p,o-Xylenes)	130 - 2596	ND	

Final Approval



 Karen Winternheimer
 11Feb2022
 02:06:00 PM MST

PREPARED BY / DATE



 Ryan Weems
 11Feb2022
 02:09:00 PM MST

APPROVED BY / DATE


<https://results.botanacor.com/api/v1/coas/uuid/96c419c6-f4bb-47ff-8d3f-be0285d14c45>

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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CERTIFICATE OF ANALYSIS

Prepared for:
Elixinol LLC

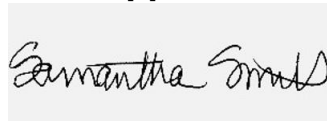
10170 Church Ranch Way, Ste 400
Westminster, CO USA 80021

Cinnamint Tincture 1000mg - Lot 220040

Batch ID or Lot Number: 220030	Test: Heavy Metals	Reported: 09Feb2022	USDA License: NA
Matrix: Unit Co	Test ID: T000191196	Started: 08Feb2022	Sampler ID: NA
	Method(s): TM19 (ICP-MS): Heavy Metals	Received: 08Feb2022	Status: NA

Heavy Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.05 - 4.50	ND	
Cadmium	0.04 - 4.25	ND	
Mercury	0.04 - 4.42	ND	
Lead	0.04 - 4.38	ND	

Final Approval



Sam Smith
09Feb2022
12:44:00 PM MST

PREPARED BY / DATE



Ryan Weems
09Feb2022
01:00:00 PM MST

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/b5880b9f-010b-4678-9d1b-6b03d68c7e32>

Definitions

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

 Prepared for:
Elixinol LLC


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

Cinnamint Tincture 1000mg - Lot 220040

Batch ID or Lot Number: 220030	Test: Microbial Contaminants	Reported: 02Mar2022	USDA License: N/A
Matrix: Finished Product	Test ID: T000191195	Started: 08Feb2022	Sampler ID: N/A
	Method(s): TM25 (qPCR) TM24, TM26, TM27 (Culture Plating): Microbial (Colorado Panel)	Received: 08Feb2022	Status: N/A

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


 Eden Thompson-Wright
 11Feb2022
 02:12:00 PM MST

PREPARED BY / DATE



 Brianne Maillot
 11Feb2022
 03:32:00 PM MST

APPROVED BY / DATE


<https://results.botanacor.com/api/v1/coas/uuid/ee248552-4ab4-4054-93a0-92816e54cef4>
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

Cinnamint Tincture 1000mg - Lot 220040

Batch ID or Lot Number: 220030	Test: Pesticides	Reported: 10Feb2022	USDA License: NA
Matrix: Concentrate	Test ID: T000191194	Started: 09Feb2022	Sampler ID: NA
	Method(s): TM17 (LC-QQ LC MS/MS)	Received: 08Feb2022	Status: NA

Pesticides	Dynamic Range (ppb)	Result (ppb)	Pesticides	Dynamic Range (ppb)	Result (ppb)
Abamectin	302 - 2763	ND	Malathion	293 - 2690	ND
Acephate	42 - 2733	ND	Metalaxyl	44 - 2705	ND
Acetamiprid	42 - 2693	ND	Methiocarb	41 - 2733	ND
Azoxystrobin	47 - 2680	ND	Methomyl	42 - 2695	ND
Bifenazate	44 - 2663	ND	MGK 264 1	168 - 1644	ND
Boscalid	39 - 2746	ND	MGK 264 2	108 - 1144	ND
Carbaryl	41 - 2719	ND	Myclobutanil	36 - 2757	ND
Carbofuran	42 - 2734	ND	Naled	50 - 2795	ND
Chlorantraniliprole	42 - 2745	ND	Oxamyl	41 - 2727	ND
Chlorpyrifos	33 - 2777	ND	Pacllobutrazol	44 - 2713	ND
Clofentezine	282 - 2732	ND	Permethrin	266 - 2766	ND
Diazinon	288 - 2712	ND	Phosmet	45 - 2681	ND
Dichlorvos	286 - 2706	ND	Prophos	293 - 2723	ND
Dimethoate	43 - 2683	ND	Propoxur	41 - 2711	ND
E-Fenpyroximate	292 - 2723	ND	Pyridaben	290 - 2772	ND
Etofenprox	41 - 2761	ND	Spinosad A	33 - 2275	ND
Etoxazole	289 - 2736	ND	Spinosad D	47 - 504	ND
Fenoxycarb	41 - 2700	ND	Spiromesifen	279 - 2764	ND
Fipronil	35 - 2642	ND	Spirotetramat	309 - 2668	ND
Flonicamid	44 - 2704	ND	Spiroxamine 1	17 - 1193	ND
Fludioxonil	308 - 2733	ND	Spiroxamine 2	23 - 1578	ND
Hexythiazox	39 - 2747	ND	Tebuconazole	283 - 2693	ND
Imazalil	274 - 2753	ND	Thiacloprid	42 - 2693	ND
Imidacloprid	42 - 2709	ND	Thiamethoxam	40 - 2690	ND
Kresoxim-methyl	47 - 2726	ND	Trifloxystrobin	43 - 2731	ND

Final Approval



Daniel Weidensaul
10Feb2022
02:48:00 PM MST

PREPARED BY / DATE



Sam Smith
10Feb2022
02:55:00 PM MST

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/6c7d8fb0-4d28-4533-8d1f-6e1681291765>

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 17025:2005 Accredited A2LA.



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Prepared for:

Cinnamint Tincture 1000mg - Lot 220040**Elixinol LLC**

Batch ID or Lot Number: 220030	Test: Mycotoxins	Reported: 2/12/22	Location: 10170 Church Ranch Way, Ste 400 Westminster, CO 80021
Matrix: Concentrate	Test ID: T000191199	Started: 2/10/22	USDA License: N/A
Status: N/A	Method: TM18 (UHPLC-QQQ LCMS/MS): Mycotoxins (Colorado Panel)	Received: 02/08/2022 @ 09:33 AM	Sampler ID: N/A

MYCOTOXIN DETERMINATION

Compound	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	3.3 - 140.5	ND	N/A
Aflatoxin B1	1 - 35.7	ND	
Aflatoxin B2	1.1 - 35.4	ND	
Aflatoxin G1	1.1 - 35.5	ND	
Aflatoxin G2	1.3 - 35	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	


PREPARED BY / DATE
Ryan Weems
12-Feb-22
9:00 AM
APPROVED BY / DATE
Sam Smith
12-Feb-22
9:14 AM**Definitions**

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

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CDPHE Certified



Certificate #4329.02

Certificate of Analysis

Elixinol, LLC

10170 Church Ranch
Westminster Colorado 80021 United States

Sample Name:	Cinnamint Tincture 1000mg - 220040	Eurofins Sample:	11408951
Project ID	ELIXINOL-20220203-0003	Receipt Date	09-Feb-2022
PO Number	cvd	Receipt Condition	Ambient temperature
Lot Number	220030	Login Date	03-Feb-2022
Sample Serving Size	1 mL	Date Started	09-Feb-2022
		Sampled	Sample results apply as received
		Online Order	13484-16BEB3F9

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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