

Prepared for:

**THC-Free Tincture - 210082**
**Elixinol LLC**


Batch ID or Lot Number: <b>210082</b>	Test: <b>Potency</b>	Reported: <b>11/17/21</b>	Location: 10170 Church Ranch Way, Ste 400 Westminster, CO 80021
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Matrix: Solution	Test ID: T000175754	Started: 11/16/21	USDA License: N/A
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Status: N/A	Method: TM14 (HPLC-DAD): Potency - Broad Spectrum Analysis, 0.01% THC (Colorado Panel)	Received: 11/11/2021 @ 11:13 AM	Sampler ID: N/A
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**CANNABINOID PROFILE**

Compound	LOD (mg/mL)	LOQ (mg/mL)	Result (mg/mL)	Result (mg/g)	Notes
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.027	0.084	ND	ND	Density = 0.985g/mL
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.031	0.095	ND	ND	
Cannabidiolic acid (CBDA)	0.228	0.609	ND	ND	
Cannabidiol (CBD)	0.222	0.594	22.619	22.96	
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.191	0.633	ND	ND	
Cannabinolic Acid (CBNA)	0.109	0.362	ND	ND	
Cannabinol (CBN)	0.050	0.166	ND	ND	
Cannabigerolic acid (CBGA)	0.160	0.531	ND	ND	
Cannabigerol (CBG)	0.038	0.127	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.135	0.449	ND	ND	
Tetrahydrocannabivarin (THCV)	0.035	0.116	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.095	0.254	ND	ND	
Cannabidivarin (CBDV)	0.053	0.140	0.123*	0.12*	
Cannabichromenic Acid (CBCA)	0.062	0.205	ND	ND	
Cannabichromene (CBC)	0.067	0.224	ND	ND	
<b>Total Cannabinoids</b>			<b>22.742</b>	<b>23.09</b>	
Total Potential THC**			ND	ND	
Total Potential CBD**			22.619	22.96	

  
 Hannah Wright  
 17-Nov-2021  
 06:42 PM

  
 Daniel Weidensaul  
 17-Nov-21  
 6:45 PM

PREPARED BY / DATE

APPROVED BY / DATE

**Definitions**

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)

\* Indicates a value below the Limit of Quantitation (LOQ) and above the Limit of Detection (LOD).

\*\* Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.

$$\text{Total THC} = \text{THC} + (\text{THCa} \times 0.877)$$

$$\text{Total CBD} = \text{CBD} + (\text{CBDa} \times 0.877)$$

Total Cannabinoids result reflects the absolute sum of all cannabinoids detected.

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

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Certificate #4329.02

## THC-Free Tincture - 210082

<b>Batch ID:</b>	210082	<b>Test ID:</b>	T000175755
<b>Type:</b>	Unit Co	<b>Submitted:</b>	11/11/2021 @ 11:13 AM
<b>Test:</b>	Trace THC	<b>Started:</b>	11/16/2021
<b>Method:</b>	TM20 (HPLC-DAD)	<b>Reported:</b>	11/17/2021

## TRACE THC/THCa PROFILE

Compound	Dynamic Range (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.001 - 0.682	0.001	0.01
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.002 - 1.366	ND**	ND**
Total Potential THC*		0.001	0.01

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)

\* Total Potential THC is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.  
Total THC = THC + (THCa \*(0.877))

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

\*\*\* ALOO = Above Limit Of Quantitation (Defined by Dynamic Range of the method)

## NOTES:

N/A

## FINAL APPROVAL

Daniel Weidensaul  
17-Nov-2021  
2:40 PMSam Smith  
17-Nov-2021  
2:43 PM

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Prepared for:


**THC-Free Tincture - 210082**
**Elixinol LLC**

Batch ID or Lot Number: <b>210082</b>	Test: <b>Pesticides</b>	Reported: <b>11/19/21</b>	Location: 10170 Church Ranch Way, Ste 400 Westminster, CO 80021
Matrix: Concentrate	Test ID: T000175756	Started: 11/18/21	USDA License: N/A
Status: N/A	Method: TM17(LC-QQQ LC MS/MS):	Received: 11/11/2021 @ 11:13 AM	Sampler ID: N/A

**PESTICIDE DETERMINATION**

Compound	LOQ (ppb)	Result (ppb)	Compound	LOQ (ppb)	Result (ppb)	Compound	LOQ (ppb)	Result (ppb)
Acephate	38	ND	Fenoxycarb	43	ND	Paclobutrazol	41	ND
Acetamiprid	38	ND	Fipronil	37	ND	Permethrin	277	ND
Avermectin	282	ND	Flonicamid	35	ND	Phosmet	43	ND
Azoxystrobin	44	ND	Fludioxonil	305	ND	Prophos	294	ND
Bifenazate	44	ND	Hexythiazox	37	ND	Propoxur	41	ND
Boscalid	43	ND	Imazalil	278	ND	Pyridaben	290	ND
Carbaryl	36	ND	Imidacloprid	44	ND	Spinosad A	34	ND
Carbofuran	40	ND	Kresoxim-methyl	150	ND	Spinosad D	53	ND
Chlorantraniliprole	43	ND	Malathion	292	ND	Spiromesifen	261	ND
Chlorpyrifos	500	ND	Metalaxyl	41	ND	Spirotetramat	287	ND
Clofentezine	291	ND	Methiocarb	40	ND	Spiroxamine 1	18	ND
Diazinon	270	ND	Methomyl	40	ND	Spiroxamine 2	23	ND
Dichlorvos	255	ND	MGK 264 1	161	ND	Tebuconazole	297	ND
Dimethoate	39	ND	MGK 264 2	118	ND	Thiacloprid	37	ND
E-Fenpyroximate	284	ND	Myclobutanil	42	ND	Thiamethoxam	39	ND
Etofenprox	41	ND	Naled	44	ND	Trifloxystrobin	43	ND
Etoxazole	289	ND	Oxamyl	1500	ND			


 Karen Winternheimer  
 11/19/2021  
 12:16:00 PM


 Sam Smith  
 11/19/2021  
 12:21:00 PM

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**Definitions**

LOQ = Limit of Quantification  
 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.



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Prepared for:

**THC-Free Tincture - 210082**
**Elixinol LLC**


Batch ID or Lot Number: <b>210082</b>	Test: <b>Metals</b>	Reported: <b>11/17/21</b>	Location: 10170 Church Ranch Way, Ste 400 Westminster, CO 80021
Matrix: Unit Co	Test ID: T000175758	Started: 11/16/21	USDA License: N/A
Status: N/A	Method: TM19 (ICP-MS): Heavy Metals (Colorado Panel)	Received: 11/11/2021 @ 11:13 AM	Sampler ID: N/A

**HEAVY METALS DETERMINATION**

Compound	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.043 - 4.32	ND	
Cadmium	0.044 - 4.40	ND	
Mercury	0.043 - 4.34	ND	
Lead	0.042 - 4.23	ND	


 Daniel Weidensaul  
 17-Nov-21  
 1:38 PM

PREPARED BY / DATE


 Sam Smith  
 17-Nov-21  
 1:41 PM

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**Definitions**

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

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Prepared for:

**THC-Free Tincture - 210082**
**Elixinol LLC**

Batch ID or Lot Number: <b>210082</b>	Test: <b>Residual Solvents</b>	Reported: <b>11/17/21</b>	Location: 10170 Church Ranch Way, Ste 400 Westminster, CO 80021
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Matrix: N/A	Test ID: T000175759	Started: 11/17/21	USDA License: N/A
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Status: N/A	Methods: TM04 (GC-MS): Residual Solvents (Colorado Panel)	Received: 11/11/2021 @ 11:13 AM	Sampler ID: N/A
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**RESIDUAL SOLVENTS DETERMINATION**

Solvent	Dynamic Range (ppm)	Result (ppm)	Notes
<b>Propane</b>	89 - 1785	*ND	
<b>Butanes</b> (Isobutane, n-Butane)	180 - 3608	*ND	
<b>Methanol</b>	51 - 1011	*ND	
<b>Pentane</b>	69 - 1375	*ND	
<b>Ethanol</b>	70 - 1402	*ND	
<b>Acetone</b>	80 - 1601	*ND	
<b>Isopropyl Alcohol</b>	84 - 1672	*ND	
<b>Hexane</b>	5 - 97	*ND	
<b>Ethyl Acetate</b>	81 - 1610	*ND	
<b>Benzene</b>	0.2 - 3.2	*ND	
<b>Heptanes</b>	76 - 1530	*ND	
<b>Toluene</b>	15 - 290	*ND	
<b>Xylenes</b> (m,p,o-Xylenes)	105 - 2100	*ND	


 Hannah Wright  
 17-Nov-21  
 4:48 PM


 Sam Smith  
 17-Nov-21  
 4:51 PM

PREPARED BY / DATE

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**Definitions**

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

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Prepared for:

**THC-Free Tincture - 210082**
**Elixinol LLC**

Batch ID or Lot Number: <b>210082</b>	Test: <b>Microbial Contaminants</b>	Reported: <b>11/15/21</b>	Location: 10170 Church Ranch Way, Ste 400 Westminster, CO 80021
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Matrix: Finished Product	Test ID: t000175757	Started: 11/12/21	USDA License: N/A
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Status: N/A	Methods: TM25 (qPCR) TM24, TM26, TM27(Culture Plating): Microbial (Colorado Panel)	Received: 11/11/2021 @ 11:13 AM	Sampler ID: N/A
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**MICROBIAL CONTAMINANTS DETERMINATION**

Contaminant	Method	LOD	LLOQ	ULOQ	Result	Notes
<b>Total Aerobic Count*</b>	TM-26, Culture Plating	10 <sup>2</sup> CFU/g	10 <sup>3</sup> CFU/g	1.5x10 <sup>5</sup> CFU/g	None Detected	Free from visual mold, mildew, and foreign matter
<b>Total Coliforms*</b>	TM-27, Culture Plating	10 <sup>1</sup> CFU/g	10 <sup>2</sup> CFU/g	1.5x10 <sup>4</sup> CFU/g	None Detected	
<b>Total Yeast and Mold*</b>	TM-24, Culture Plating	10 <sup>1</sup> CFU/g	10 <sup>2</sup> CFU/g	1.5x10 <sup>4</sup> CFU/g	None Detected	
<b>E. coli (STEC)</b>	TM-25, PCR	1 CFU/25 g	NA	NA	Absent	
<b>Salmonella</b>	TM-25, PCR	1 CFU/25 g	NA	NA	Absent	

  
 Brett Hudson  
 11/15/2021  
 2:00:00 PM

PREPARED BY / DATE

  
 Brianne Maillot  
 11/15/2021  
 4:50:00 PM

APPROVED BY / DATE

**Definitions**

LOD = Limit of Detection | LLOQ = Lower Limit of Quantitation | ULOQ = Upper Limit of Quantitation

 CFU/g = Colony Forming Units per Gram | STEC = Shiga Toxin-Producing *E. coli*

\* 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<sup>2</sup> = 100 CFU  
 10<sup>3</sup> = 1,000 CFU  
 10<sup>4</sup> = 10,000 CFU  
 10<sup>5</sup> = 100,000 CFU

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Prepared for:

## THC-Free Tincture - 210082

**Elixinol LLC**

Batch ID or Lot Number: <b>210082</b>	Test: <b>Mycotoxins</b>	Reported: <b>11/18/21</b>	Location: 10170 Church Ranch Way, Ste 400 Westminster, CO 80021
Matrix: Concentrate	Test ID: T000175760	Started: 11/17/21	USDA License: N/A
Status: N/A	Method: TM18 (UHPLC-QQQ LCMS/MS): Mycotoxins (Colorado Panel)	Received: 11/11/2021 @ 11:13 AM	Sampler ID: N/A

## MYCOTOXIN DETERMINATION

Compound	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	3.4 - 139	ND	N/A
Aflatoxin B1	1 - 34.3	ND	
Aflatoxin B2	1 - 34.1	ND	
Aflatoxin G1	1 - 33.3	ND	
Aflatoxin G2	1 - 33.4	ND	
<b>Total Aflatoxins (B1, B2, G1, and G2)</b>		ND	

*Samantha Smith*

Sam Smith  
18-Nov-21  
8:42 AM

PREPARED BY / DATE

*Courtney Richards*

Courtney Richards  
18-Nov-21  
4:45 PM

APPROVED BY / DATE

### Definitions

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

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Certificate #4329.02

## Certificate of Analysis

### Elixinol, LLC

10170 Church Ranch  
Westminster Colorado 80021 United States

<b>Sample Name:</b>	<b>THC-Free Tincture - 210082</b>	<b>Eurofins Sample:</b>	<b>11139523</b>
<b>Project ID</b>	ELIXINOL-20211110-0039	<b>Receipt Date</b>	11-Nov-2021
<b>PO Number</b>	CVD	<b>Receipt Condition</b>	Ambient temperature
<b>Lot Number</b>	210082	<b>Login Date</b>	10-Nov-2021
<b>Sample Serving Size</b>	1 mL	<b>Date Started</b>	17-Nov-2021
		<b>Sampled</b>	Sample results apply as received
		<b>Online Order</b>	13484-164EAC82

#### 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.

Printed: 22-Nov-2021 6:01 pm

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