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1 of 8

## 1500mg Mint Tincture

Sample ID: SA-230403-19719 Batch: 2022-0843P Type: Finished Products

Matrix: Oil / Liquid - Hemp Seed Oil

Unit Mass (g):

Collected: 03/22/2023 Received: 03/27/2023 Completed: 03/31/2023 Client

Wrapped in Hearts 10855 Giesler Loop Shipman, IL 62685

USA



Summary

Test Cannabinoids Foreign Matter Heavy Metals Microbials Mycotoxins Pesticides Residual Solvents Terpenes

**Date Tested** Status 03/30/2023 Tested 03/27/2023 Tested 03/28/2023 Passed 03/31/2023 Passed 03/30/2023 Passed 03/30/2023 Passed 03/29/2023 Passed 03/30/2023 Tested

0.0999 mg/mL Total Δ9-THC

48.3 mg/mL CBD

48.8 mg/mL Total Cannabinoids

**Not Tested** Moisture Content **Not Detected** Foreign Matter

Internal Standard Normalization

Yes

Cannabinoids by HPLC-PDA, LC-MS/MS, and/or GC-MS/MS

Analyte	LOD (mg/mL)	LOQ (mg/mL)	Result (mg/mL)	Result (%)	Result (mg/unit)
CBC	0.00095	0.00284	ND	ND	ND
CBCA	0.00181	0.00543	ND	ND	ND
CBCV	0.0006	0.0018	ND	ND	ND
CBD	0.00081	0.00242	48.3	5.18	1450
CBDA	0.00043	0.0013	ND	ND	ND
CBDV	0.00061	0.00182	0.187	0.0201	5.62
CBDVA	0.00021	0.00063	ND	ND	ND
CBG	0.00057	0.00172	0.172	0.0184	5.16
CBGA	0.00049	0.00147	ND	ND	ND
CBL	0.00112	0.00335	ND	ND	ND
CBLA	0.00124	0.00371	ND	ND	ND
CBN	0.00056	0.00169	ND	ND	ND
CBNA	0.0006	0.00181	ND	ND	ND
CBT	0.0018	0.0054	0.0241	0.00258	0.723
Δ8-ΤΗС	0.00104	0.00312	ND	ND	ND
Δ9-ΤΗС	0.00076	0.00227	0.0999	0.0107	3.00
Δ9-ΤΗCΑ	0.00084	0.00251	ND	ND	ND
Δ9-ΤΗCV	0.00069	0.00206	ND	ND	ND
Δ9-THCVA	0.00062	0.00186	ND	ND	ND
Total Δ9-THC			0.0999	0.0107	3.00
Total			48.8	5.23	1460

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; RL = Reporting Limit; Δ = Delta; Total Δ9-THC = Δ9-THCA \* 0.877 + Δ9-THC; Total CBD = CBDA \* 0.877 + CBD;

Generated By: Ryan Bellone CCO

Date: 09/01/2023

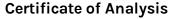
Tested By: Nicholas Howard Scientist Date: 03/30/2023







ISO/IEC 17025:2017 Accredited Accreditation #108651



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#### **KCA Laboratories** 232 North Plaza Drive Nicholasville, KY 40356

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2 of 8

## 1500mg Mint Tincture

Sample ID: SA-230403-19719
Batch: 2022-0843P
Type: Finished Products

Matrix: Oil / Liquid - Hemp Seed Oil

Unit Mass (g):

Collected: 03/22/2023 Received: 03/27/2023 Completed: 03/31/2023 Client

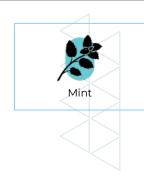
Wrapped in Hearts 10855 Giesler Loop Shipman, IL 62685

USA

## Terpenes by GC-MS

Analyte	LOD (%)	LOQ (%)	Result (%)	Analyte	LOD (%)	LOQ (%)	Result (%)
<b>α</b> -Bisabolol	0.002	0.01	ND	Limonene	0.002	0.01	<loq< th=""></loq<>
(+)-Borneol	0.002	0.01	ND	Linalool	0.002	0.01	ND
Camphene	0.002	0.01	ND	β-myrcene	0.002	0.01	ND
Camphor	0.004	0.02	ND	Nerol	0.002	0.01	ND
3-Carene	0.002	0.01	ND	cis-Nerolidol	0.002	0.01	ND
β-Caryophyllene	0.002	0.01	0.0159	trans-Nerolidol	0.002	0.01	ND
Caryophyllene Oxide	0.002	0.01	ND	Ocimene	0.002	0.01	ND
<b>α</b> -Cedrene	0.002	0.01	ND	<b>α</b> -Phellandrene	0.002	0.01	ND
Cedrol	0.002	0.01	ND	α-Pinene	0.002	0.01	ND
Eucalyptol	0.002	0.01	0.01828	β-Pinene	0.002	0.01	<loq< th=""></loq<>
Fenchone	0.004	0.02	ND	Pulegone	0.002	0.01	0.01081
Fenchyl Alcohol	0.002	0.01	ND	Sabinene	0.002	0.01	ND
Geraniol	0.002	0.01	ND	Sabinene Hydrate	0.002	0.01	ND
Geranyl Acetate	0.002	0.01	ND	α-Terpinene	0.002	0.01	ND
Guaiol	0.002	0.01	ND	γ-Terpinene	0.002	0.01	<loq< th=""></loq<>
α-Humulene	0.002	0.01	ND	α-Terpineol	0.001	0.005	<loq< th=""></loq<>
Isoborneol	0.002	0.01	ND	γ-Terpineol	0.001	0.005	ND
Isopulegol	0.002	0.01	ND	Terpinolene	0.002	0.01	ND
				Valencene	0.002	0.01	ND
				Total Terpenes (%)			0.0611

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit











Generated By: Ryan Bellone CCO

Date: 09/01/2023

Tested By: Jasper van Heemst Principal Scientist Date: 03/30/2023





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3 of 8

## 1500mg Mint Tincture

Sample ID: SA-230403-19719 Batch: 2022-0843P Type: Finished Products Matrix: Oil / Liquid - Hemp Seed Oil

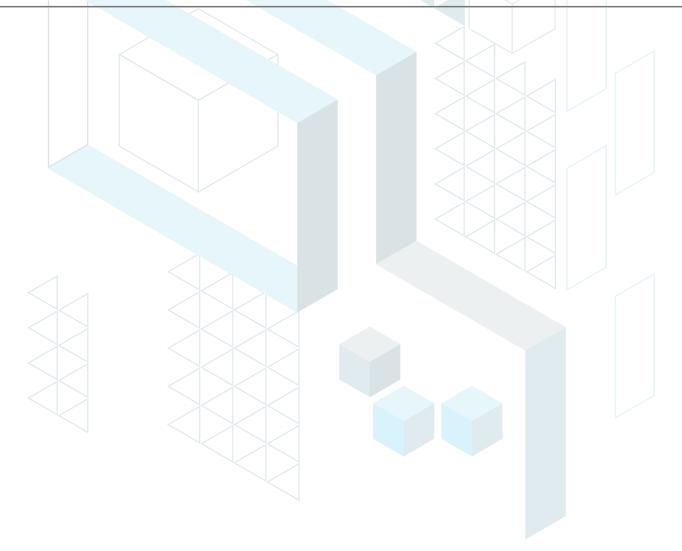
Unit Mass (g):

Collected: 03/22/2023 Received: 03/27/2023 Completed: 03/31/2023 **Client** Wrapped in Hearts 10855 Giesler Loop Shipman, IL 62685 USA

## **Heavy Metals by ICP-MS**

Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)	P/F
Arsenic	2	20	ND	Р
Cadmium	1	20	ND	Р
Lead	2	20	ND	Р
Mercury	12	50	ND	Р

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit



Generated By: Ryan Bellone CCO Date: 09/01/2023 Tested By: Kelsey Rogers Scientist Date: 03/28/2023





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4 of 8

## 1500mg Mint Tincture

Sample ID: SA-230403-19719 Batch: 2022-0843P Type: Finished Products

Matrix: Oil / Liquid - Hemp Seed Oil

Unit Mass (g):

Collected: 03/22/2023 Received: 03/27/2023 Completed: 03/31/2023 Client

Wrapped in Hearts 10855 Giesler Loop Shipman, IL 62685

USA

# Pesticides by LC-MS/MS

_									
Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)	P/F	Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)	P/F
Acephate	30	100	ND	Р	Hexythiazox	30	100	ND	Р
Acetamiprid	30	100	ND	Р	Imazalil	30	100	ND	Р
Aldicarb	30	100	ND	Р	Imidacloprid	30	100	ND	Р
Azoxystrobin	30	100	ND	Р	Kresoxim methyl	30	100	ND	Р
Bifenazate	30	100	ND	Р	Malathion	30	100	ND	Р
Boscalid	30	100	ND	Р	Metalaxyl	30	100	ND	Р
Carbaryl	30	100	ND	Р	Methiocarb	30	100	ND	Р
Carbofuran	30	100	ND	Р	Methomyl	30	100	ND	Р
Chloranthraniliprole	30	100	ND	Р	Mevinphos	30	100	ND	Р
Chlorfenapyr	30	100	ND	Р	Myclobutanil	30	100	ND	Р
Chlorpyrifos	30	100	ND	Р	Naled	30	100	ND	Р
Clofentezine	30	100	ND	Р	Oxamyl	30	100	ND	Р
Coumaphos	30	100	ND	Р	Paclobutrazol	30	100	ND	Р
Daminozide	30	100	ND	Р	Permethrin	30	100	ND	Р
Diazinon	30	100	ND	Р	Phosmet	30	100	ND	Р
Dichlorvos	30	100	ND	Р	Piperonyl Butoxide	30	100	ND	Р
Dimethoate	30	100	ND	Р	Prallethrin	30	100	ND	Р
Dimethomorph	30	100	ND	Р	Propiconazole	30	100	ND	Р
Ethoprophos	30	100	ND	Р	Propoxur	30	100	ND	Р
Etofenprox	30	100	ND	Р	Pyrethrins	30	100	ND	Р
Etoxazole	30	100	ND	Р	Pyridaben	30	100	ND	Р
Fenhexamid	30	100	ND	Р	Spinetoram	30	100	ND	Р
Fenoxycarb	30	100	ND	Р	Spinosad	30	100	ND	Р
Fenpyroximate	30	100	ND	Р	Spiromesifen	30	100	ND	Р
Fipronil	30	100	ND	P	Spirotetramat	30	100	ND	Р
Flonicamid	30	100	ND	Р	Spiroxamine	30	100	ND	Р
Fludioxonil	30	100	ND	Р	Tebuconazole	30	100	ND	Р
					Thiacloprid	30	100	ND	Р
					Thiamethoxam	30	100	ND	Р
					Trifloxystrobin	30	100	ND	Р

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit

Generated By: Ryan Bellone CCO

Date: 09/01/2023

Tested By: Jasper van Heemst Principal Scientist Date: 03/30/2023





Nicholasville, KY 40356

5 of 8

kca labs

1500mg Mint Tincture

Sample ID: SA-230403-19719 Batch: 2022-0843P Type: Finished Products

Matrix: Oil / Liquid - Hemp Seed Oil

Unit Mass (g):

Collected: 03/22/2023 Received: 03/27/2023 Completed: 03/31/2023

KDA Lic.# P\_0058

Client

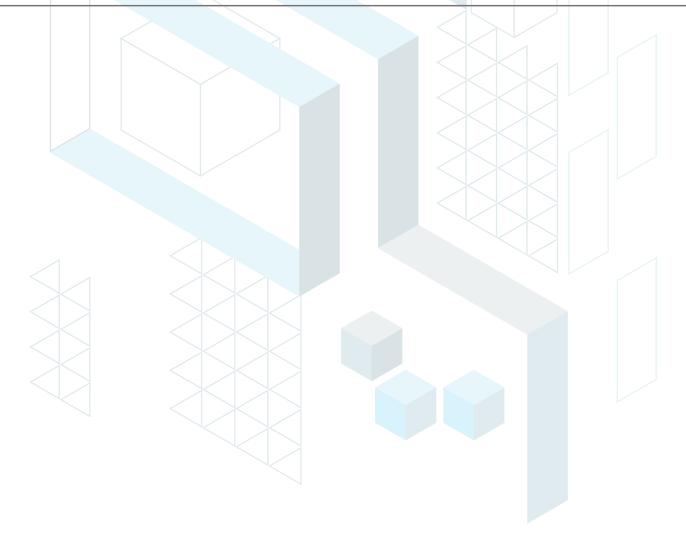
Wrapped in Hearts 10855 Giesler Loop Shipman, IL 62685

USA

## Mycotoxins by LC-MS/MS

Analyte	LOD (ppb)	LOQ (ppb)	Result (ppb)	P/F	
B1	1	5	ND	P	
B2	1	5	ND	Р	
G1	1	5	ND	Р	
G2	1	5	ND	P	
Ochratoxin A	1	5	ND	P	
					<u> </u>

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit



Generated By: Ryan Bellone CCO

Date: 09/01/2023

Tested By: Jasper van Heemst Principal Scientist Date: 03/30/2023



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#### **Certificate of Analysis**

6 of 8

## 1500mg Mint Tincture

Sample ID: SA-230403-19719 Batch: 2022-0843P Type: Finished Products Matrix: Oil / Liquid - Hemp Seed Oil

Unit Mass (g):

Collected: 03/22/2023 Received: 03/27/2023 Completed: 03/31/2023 **Client** Wrapped in Hearts 10855 Giesler Loop Shipman, IL 62685 USA

# Microbials by PCR and Plating

Analyte	LOD (CFU/g)	Result (CFU/g)	P/F
Total aerobic count		ND	P
Total coliforms	1	ND	P
Generic E. coli	1	ND	P
Salmonella spp.	1	ND	Р
Shiga-toxin producing E. coli (STEC)	1	ND	P

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; CFU = Colony Forming Units; P = Pass; F = Fail; RL = Reporting Limit



Generated By: Ryan Bellone CCO Date: 09/01/2023

Tested By: Lucy Jone: Scientist Date: 03/31/2023



This product or substance has been tested by KCA Laboratories using validated testing methodologies and an ISO/IEC 170252017 accredited quality system. Values reported relate only to the product or substance tested. The reported result is based on a sample weight. Unless otherwise stated, results of tests performed on all quality control samples met criteria for acceptance established by KCA Laboratories. KCA Laboratories makes no claims as to the efficacy, safety or other risks associated with any detected or non-detected amounts of any substances reported herein. This Certificate of Analysis shall not be reproduced except in full, without the written approval of KCA Laboratories KCA Laboratories and provide measurement uncertainty upon request.





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7 of 8

## 1500mg Mint Tincture

Sample ID: SA-230403-19719 Batch: 2022-0843P Type: Finished Products

Matrix: Oil / Liquid - Hemp Seed Oil

Unit Mass (g):

Collected: 03/22/2023 Received: 03/27/2023 Completed: 03/31/2023 Client

Wrapped in Hearts 10855 Giesler Loop Shipman, IL 62685

USA

## Residual Solvents by HS-GC-MS

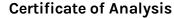
Analyte	LOD (ppm)	LOQ (ppm)	Result (ppm)	P/F	Analyte	LOD (ppm)	LOQ (ppm)	Result (ppm)	P/F
Acetone	167	500	ND	P	Ethylene Glycol	21	62	ND	Р
Acetonitrile	14	41	ND	Р	Ethylene Oxide	0.5	1	ND	Р
Benzene	0.5	1	ND	Р	Heptane	167	500	ND	Р
Butane	167	500	ND	Р	n-Hexane	10	29	ND	Р
1-Butanol	167	500	ND	Р	Isobutane	167	500	ND	Р
2-Butanol	167	500	ND	Р	Isopropyl Acetate	167	500	ND	Р
2-Butanone	167	500	ND	Р	Isopropyl Alcohol	167	500	ND	Р
Chloroform	2	6	ND	Р	Isopropylbenzene	167	500	ND	Р
Cyclohexane	129	388	ND	Р	Methanol	100	300	ND	Р
1,2-Dichloroethane	0.5	1	ND	Р	2-Methylbutane	10	29	ND	Р
1,2-Dimethoxyethane	4	10	ND	P	Methylene Chloride	20	60	ND	Р
Dimethyl Sulfoxide	167	500	ND	Р	2-Methylpentane	10	29	ND	Р
N,N-Dimethylacetamide	37	109	ND	Р	3-Methylpentane	10	29	ND	Р
2,2-Dimethylbutane	10	29	ND	Р	n-Pentane	167	500	ND	Р
2,3-Dimethylbutane	10	29	ND	Р	1-Pentanol	167	500	ND	Р
N,N-Dimethylformamide	30	88	ND	Р	n-Propane	167	500	ND	Р
2,2-Dimethylpropane	167	500	ND	Р	1-Propanol	167	500	ND	Р
1,4-Dioxane	13	38	ND	Р	Pyridine	7	20	ND	Р
Ethanol	167	500	ND	Р	Tetrahydrofuran	24	72	ND	Р
2-Ethoxyethanol	6	16	ND	Р	Toluene	30	89	ND	Р
Ethyl Acetate	167	500	ND	Р	Trichloroethylene	3	8	ND	Р
Ethyl Ether	167	500	ND	Р	Tetramethylene Sulfone	6	16	ND	Р
Ethylbenzene	3	7	ND	Р	Xylenes (o-, m-, and p-)	73	217	ND	Р

ND = Not Detected; NT = Not Tested; LOD = Limit of Detection; LOQ = Limit of Quantitation; P = Pass; F = Fail; RL = Reporting Limit

RAL

Generated By: Ryan Bellone CCO Tested By: Scott Caudill Laboratory Manager Date: 03/29/2023







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8 of 8

## 1500mg Mint Tincture

Sample ID: SA-230403-19719 Batch: 2022-0843P Type: Finished Products

Matrix: Oil / Liquid - Hemp Seed Oil

Unit Mass (g):

Collected: 03/22/2023 Received: 03/27/2023 Completed: 03/31/2023

#### Client

Wrapped in Hearts 10855 Giesler Loop Shipman, IL 62685 USA

# **Reporting Limit Appendix**

#### Heavy Metals - Colorado CDPHE

Analyte	Li	mit (ppl	) Analyte	Limit (ppb)
Arsenic		1500	Lead	500
Cadmium		500	Mercury	1500

#### Microbials -

Analyte	Limit (CFU/ g) Analyte	Limit (CFU/ g)
Total coliforms	100 Total aerobic count	100000

#### Residual Solvents - USP 467

Analyte	Limit (ppm)	Analyte	Limit (ppn
Acetone	5000	Ethylene Glycol	620
Acetonitrile	410	Ethylene Oxide	1
Benzene	2	Heptane	5000
Butane	5000	n-Hexane	290
1-Butanol	5000	Isobutane	5000
2-Butanol	5000	Isopropyl Acetate	5000
2-Butanone	5000	Isopropyl Alcohol	5000
Chloroform	60	Isopropylbenzene	5000
Cyclohexane	3880	Methanol	3000
1,2-Dichloroethane	5	2-Methylbutane	290
1,2-Dimethoxyethane	100	Methylene Chloride	600
Dimethyl Sulfoxide	5000	2-Methylpentane	290
N,N-Dimethylacetamide	1090	3-Methylpentane	290
2,2-Dimethylbutane	290	n-Pentane	5000
2,3-Dimethylbutane	290	1-Pentanol	5000
N,N-Dimethylformamide	880	n-Propane	5000
2,2-Dimethylpropane	5000	1-Propanol	5000
1,4-Dioxane	380	Pyridine	200
Ethanol	5000	Tetrahydrofuran	720
2-Ethoxyethanol	160	Toluene	890
Ethyl Acetate	5000	Trichloroethylene	80
Ethyl Ether	5000	Tetramethylene Sulfone	160
Ethylbenzene	70	Xylenes (o-, m-, and p-)	2170

#### Pesticides - CA DCC

Analyte	Limit (ppb)	Analyte	Limit (ppb)
Aldicarb	30	Imidacloprid	3000
Azoxystrobin	40000	Kresoxim methy	1000
Bifenazate	5000	Malathion	5000
Boscalid	10000	Metalaxyl	15000
Carbaryl	500	Methiocarb	30
Carbofuran	30	Methomyl	100
Chloranthraniliprole	40000	Mevinphos	30
Chlorfenapyr	30	Myclobutanil	9000
Chlorpyrifos	30	Naled	500
Clofentezine	500	Oxamyl	200
Coumaphos	30	Paclobutrazol	30
Daminozide	30	Permethrin	20000
Diazinon	200	Phosmet	200
Dichlorvos	30	Piperonyl Butoxi	de 8000
Dimethoate	30	Prallethrin	400
Dimethomorph	20000	Propiconazole	20000
Ethoprophos	30	Propoxur	30
Etofenprox	30	Pyrethrins	1000
Etoxazole	1500	Pyridaben	3000
Fenhexamid	10000	Spinetoram	3000
Fenoxycarb	30	Spinosad	3000
Fenpyroximate	2000	Spiromesifen	12000
Fipronil	30	Spirotetramat	13000
Flonicamid	2000	Spiroxamine	30
Fludioxonil	30000	Tebuconazole	2000

#### Mycotoxins - Colorado CDPHE

Analyte	Limit (ppm	n) Analyte	Limit (ppm)
B1	5	B2	5
G1	5	G2	5
Ochratoxin A	5		

#### Pesticides - CA DCC

Analyte	Limit (ppb)	Analyte	Limit (ppb)
Acephate	5000	Hexythiazox	2000
Acetamiprid	5000	lmazalil	30

