



# Full Spectrum Hemp-Derived CBD 1000mg Tincture *Hint of Mint*

## Batch Specific Information

<b>Product Name:</b>	Kōkua 1000mg CBD Tincture, <i>Hint of Mint</i>
<b>Product Description:</b>	Full Spectrum Oil-Based Tincture, 1 fl oz (30 mL)
<b>Product Ingredients:</b>	Coconut MCT Oil*, Full Spectrum Hemp Extract^, Peppermint Oil*
<b>Batch No.:</b>	BP01T01
<b>Best if Used By:</b>	July 2021
<b>Date of Production:</b>	January 2020
<b>Hemp Extraction Method:</b>	CO <sub>2</sub> Extraction <i>In-House</i>
<b>Farm Location:</b>	Crestwood, Kentucky

**Produced By:**  
Botanical Processing LLC  
PO Box 32127  
Louisville, KY 40232  
(502) 742-7151  
customer@botanical-processing.com  
aloha@kokuacreations.com

\*USDA Certified Organic Ingredient  
^Produced in-house from locally sourced hemp flower

This product contains less than 0.3% THC.  
These statements have not been evaluated by the Food  
and Drug Administration. This product is not intended to  
diagnose, treat, cure, or prevent any disease.



**Marie Grinstead, PhD**  
*Born in Hawai'i, Raised in Kentucky.*

## ABOUT KŌKUA

In 2015, Marie founded Botanical Processing, a CO<sub>2</sub> extraction laboratory, while working towards her doctorate in engineering. As an extraction scientist, she focuses on researching and developing optimal CO<sub>2</sub> extraction methods as part of producing safe and effective natural products. Marie is humbled by the opportunity to share her wellness creations, and Kōkua is uniquely made using her preferred ingredients and methods.

With no better way to express her motivation behind the brand, she chose the Hawaiian word, Kōkua, meaning *the desire to help, aid, and assist others*. When she is not in the lab, Marie spends time with her family and devotes efforts towards her dance studio, 'Ike Roa, which exists to share and perpetuate the beautiful, diverse cultures of Polynesia.

**Kōkua** *the deep, self-less desire to help, aid, and assist others.*

**KokuaCreations.com**

Certificate ID: **75252**

 Received: **1/17/20**

Scan QR Code for authenticity


**Botanical Processing LLC**

 Client Sample ID: **MCT Oil Tincture**
**4484 Robards Ln**

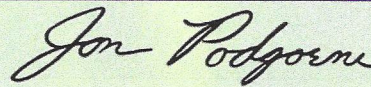
 Lot Number: **BP01T01**
**Louisville, KY 40218**

 Matrix: **Tincture/Infused Oil - MCT Oil**
**Attn: Marie Grinstead**

Authorization:

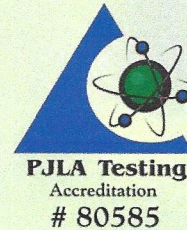
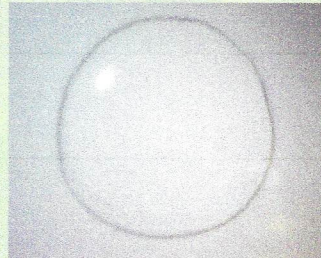
Jon Podgorni, Lead Research Chemist

Signature:



Date:

1/22/2020



The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2017. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**CN: Cannabinoid Profile & Potency [WI-10-17 & WI-10-17-01]**

 Analyst: *MAM*

 Test Date: *1/20/2020*

The client sample was analyzed for plant-based cannabinoids by Liquid Chromatography (LC). The collected data was compared to data collected for certified reference standards at known concentrations.

**75252-CN**

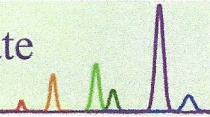
ID	Weight %	Concentration (mg/mL)	
D9-THC	0.07	0.69	
THCV	ND	ND	
CBD	3.59	33.54	
CBDV	0.08	0.74	
CBG	0.03	0.24	
CBC	0.18	1.73	
CBN	ND	ND	
THCA	ND	ND	
CBDA	0.23	2.18	
CBGA	ND	ND	
D8-THC	ND	ND	
exo-THC	ND	ND	
Total	4.19	39.13	0% Cannabinoids (wt%) 3.6%
Max THC	0.07	0.69	
Max CBD	3.80	35.46	

**Ratio of Total CBD to THC 51.2:1**

Limit of Quantitation (LOQ) = 0.01 wt%

Max THC (and Max CBD) are calculated values for total cannabinoids after heating, assuming complete decarboxylation of the acid to the neutral form. It is calculated based on the weight loss of the acid group during decarboxylation: Max THC = (0.877 x THCA) + THC. This calculation does not include other cannabinoid isomers (eg. D8-THC and exo-THC). ND = None detected above the limits of detection (LOD), which is half of LOQ.

**END OF REPORT**



Certificate ID: 76347

Received: 2/5/20

Scan QR Code for authenticity

Botanical Processing LLC

Client Sample ID: MCT Oil Tincture

4484 Robards Ln

Lot Number: BP01T01

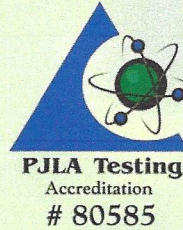
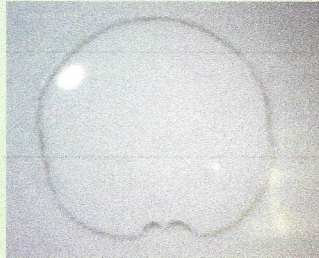
Louisville, KY 40218

Matrix: Tincture/Infused Oil - MCT Oil

Attn: Marie Grinstead



Authorization: Jon Podgorni, Lead Research Chemist	Signature: <i>Jon Podgorni</i>	Date: 2/17/2020
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**HM: Heavy Metal Analysis [WI-10-13]**

Analyst: CJS

Test Date: 2/11/2020

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**76347-HM**

Symbol	Metal	Conc. <sup>1</sup> (µg/kg)	RL	Use Limits <sup>2</sup> (µg/kg)		Status
				All	Ingestion	
As	Arsenic	ND	50	200	1500	PASS
Cd	Cadmium	ND	50	200	500	PASS
Hg	Mercury	ND	50	100	1500	PASS
Pb	Lead	ND	50	500	1000	PASS

1) ND = None detected to Lowest Limits of Detection (LLD)

2) MA Dept. of Public Health: Protocol for MMJ and MIPS, Exhibit 4(a) for all products.

3) USP exposure limits based on daily oral dosing of 1g of concentrate for a 110 lb person.

**MB1: Microbiological Contaminants [WI-10-09]**

Analyst: MM

Test Date: 2/7/2020

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**76347-MB1**

Symbol	Analysis	Results	Units	Limits*	Status
AC	Total Aerobic Bacterial Count	<100	CFU/g	100,000 CFU/g	PASS
CC	Total Coliform Bacterial Count	<100	CFU/g	1,000 CFU/g	PASS
EB	Total Bile Tolerant Gram Negative Count	<100	CFU/g	1,000 CFU/g	PASS
YM	Total Yeast & Mold	<100	CFU/g	10,000 CFU/g	PASS

Recommended limits established by the American Herbal Pharmacopoeia (AHP) monograph for Cannabis Inflorescence [2013], for consumable botanical products, including processed and unprocessed cannabis materials, and solvent-based extracts. Note: All recorded Microbiological tests are within the established limits.

**MB2: Pathogenic Bacterial Contaminants [WI-10-10]**

Analyst: LabAdmin

Test Date: 2/8/2020

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**76347-MB2**

Test ID	Analysis	Results	Units	Limits*	Status
6347-LD-ECP'	E. coli (O157)	Negative	NA	Non Detected	PASS
76347-LD-SPT	Salmonella	Negative	NA	Non Detected	PASS

Note: All recorded pathogenic bacteria tests passed.

**MY: Mycotoxin Testing [WI-10-05]**

Analyst: AKR

Test Date: 2/6/2020

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**76347-MY**

Test ID	Date	Results	MDL	Limits	Status*
Total Aflatoxin	2/6/2020	< MDL	2 ppb	< 20 ppb	PASS
Total Ochratoxin	2/6/2020	< MDL	3 ppb	< 20 ppb	PASS

**PST: Pesticide Analysis [WI-10-11]**

Analyst: CJR

Test Date: 2/17/2020

The client sample was analyzed for pesticides using Liquid Chromatography with Mass Spectrometric detection (LC/MS/MS). The method used for sample prep was based on the European method for pesticide analysis (EN 15662).

**76347-PST**

Analyte	CAS	Result	Units	LLD	Limits (ppb)	Status
Abamectin	71751-41-2	ND	ppb	0.2	300	PASS
Azoxystrobin	131860-33-8	ND	ppb	0.10	40000	PASS
Bifenazate	149877-41-8	ND	ppb	0.10	5000	PASS
Bifenthrin	82657-04-3	ND	ppb	0.20	500	PASS
Cyfluthrin	68359-37-5	ND	ppb	0.50	1000	PASS
Daminozide	1596-84-5	ND	ppb	10.00	10	*
Etoxazole	153233-91-1	ND	ppb	0.10	1500	PASS
Fenoxycarb	72490-01-8	ND	ppb	0.10	10	PASS
Imazalil	35554-44-0	ND	ppb	0.10	10	PASS
Imidacloprid	138261-41-3	ND	ppb	0.10	3000	PASS
Myclobutanil	88671-89-0	ND	ppb	0.10	9000	PASS
Paclobutrazol	76738-62-0	ND	ppb	0.10	10	PASS
Piperonyl butoxide	51-03-6	ND	ppb	0.10	8000	PASS
Pyrethrin	8003-34-7	ND	ppb	0.1	1000	PASS
Spinosad	168316-95-8	ND	ppb	0.1	3000	PASS
Spiromesifen	283594-90-1	ND	ppb	0.10	12000	PASS
Spirotetramat	203313-25-1	ND	ppb	0.10	13000	PASS
Trifloxystrobin	141517-21-7	ND	ppb	0.10	30000	PASS

\* Testing limits for ingestion established by the State of California: CCR, Title 16, Division 42, Chapter 5, Section 5313. ND indicates "none detected" above the lower limit of detection (LLD). Analytes marked with (\*) indicate analytes for which no recovery was observed for a pre-spiked matrix sample.

**VC: Analysis of Volatile Organic Compounds [WI-10-28]**

Analyst: JR

Test Date: 2/5/2020

The client sample was analyzed by Head-Space Gas Chromatography (HS-GC). The collected data was compared to data collected for certified reference standards at known concentrations.

**76347-VC**

Compound	CAS	Amount <sup>1</sup>	Limit <sup>2</sup>	RL	Status
Propane	74-98-6	ND	1,000 ppm	100	PASS
Isobutane	75-28-5	ND	1,000 ppm	100	PASS
Butane	106-97-8	ND	1,000 ppm	100	PASS
Methanol	67-56-1	ND	3,000 ppm	100	PASS
Pentane	109-66-0	ND	5,000 ppm	100	PASS
Ethanol	64-17-5	ND	5,000 ppm	100	*
Acetone	67-64-1	ND	5,000 ppm	100	PASS
Isopropanol	67-63-0	ND	5,000 ppm	100	PASS
Acetonitrile	75-05-8	ND	410 ppm	100	PASS
Hexane	110-54-3	ND	290 ppm	100	PASS
Heptane	142-82-5	ND	5,000 ppm	100	PASS

1) ND = Not detected at a level greater than the Reporting Limit (RL).

2) In ppm, based on USP recommended limits for residual solvents, adopted by the Massachusetts Department of Public Health for cannabis concentrates and extracts on 3/31/16. Butane/Propane limits are based on limits established for state of Colorado.

(\*) For ethanol, as many formulations contain flavorings based on ethanol extracts of natural products, no status has been assigned.

**END OF REPORT**