



Certificate ID: **53856 (Reissued)** Received: **5/2/19**  
 Client Sample ID: **Original Strength**  
 Lot Number: **Batch 1A**  
 Matrix: **Tincture/Infused Oil - MCT Oil**

Scan QR Code for authenticity



# ROSEBUD

CBD

Authorization: Chris Hudalla, Chief Science Officer	Signature: 	Date: 8/26/2020
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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: *LG* Test Date: *5/9/2019*

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. Reissued to update company address and add lot number. Certificate has been reissued to correct sample ID and lot number.

**53856-CN**

ID	Weight %	Concentration (mg/mL)			
D9-THC	0.0874	0.801			
THCV	0.0000	0.0000			
CBD	2.74	25.1			
CBDV	0.0137	0.126			
CBG	0.0450	0.413			
CBC	0.146	1.34			
CBN	0.0028	0.0257			
THCA	0.0000	0.0000			
CBDA	0.0121	0.111			
CBGA	0.0000	0.0000			
D8-THC	0.0000	0.0000			
exo-THC	0.0000	0.0000			
Total	3.05	27.9	0%	Cannabinoids (wt%)	2.7%
Max THC	0.0874	0.801			
Max CBD	2.75	25.2			

**Ratio of Total CBD to THC 31.5:1**

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:  $\text{Max THC} = (0.877 \times \text{THCA}) + \text{THC}$ . 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 one third of LOQ.

**EA: Elemental Analysis [WI-10-13]**

Analyst: JFD

Test Date: 5/14/2019

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. Reissued to update molybdenum MDL.

**53856-EA**

Symbol	Metal	Conc. <sup>1</sup> (µg/kg)	RL (µg/kg)	Limits <sup>2</sup> (µg/kg)	Status
Al	Aluminum	315	5	-	
As	Arsenic	ND	4	150	PASS
Cd	Cadmium	ND	1	150	PASS
Ca	Calcium	ND	500	-	
Cr	Chromium	ND	5	2,500	PASS
Co	Cobalt	ND	10	-	
Cu	Copper	ND	500	10,000	PASS
Fe	Iron	ND	5	-	
Pb	Lead	19.0	2	500	PASS
Mg	Magnesium	ND	500	-	
Mn	Manganese	ND	500	-	
Hg	Mercury	ND	2	150	PASS
Mo	Molybdenum	ND	50	1,000	PASS
Ni	Nickel	ND	50	150	PASS
P	Phosphorus	2,940	500	-	
K	Potassium	4,220	5	-	
Se	Selenium	ND	10	-	
Ag	Silver	ND	10	-	
S	Sulfur	883	5	-	
Sn	Tin	ND	5,000	-	
Zn	Zinc	239	5	-	

1) ND = None detected to the Method Detection Limit (MDL)

2) USP recommended maximum daily limits for inhalational drug product.

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

Analyst: AKR

Test Date: 5/3/2019

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.

**53856-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

Note: All recorded Microbiological tests are within the established limits.

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

Analyst: RAS

Test Date: 5/17/2019

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).

**53856-PST**

Analyte	CAS	Result	Units	LLD	Limits (ppb)	Status
Spinosad	168316-95-8	ND	ppb	0.1	3000	PASS
Pyrethrin	8003-34-7	ND	ppb	0.1	1000	PASS
Trifloxystrobin	141517-21-7	ND	ppb	0.10	30000	PASS
Spirotetramat	203313-25-1	ND	ppb	0.10	13000	PASS
Spiromesifen	283594-90-1	ND	ppb	0.10	12000	PASS
Piperonyl butoxide	51-03-6	ND	ppb	0.10	8000	PASS
Paclobutrazol	76738-62-0	ND	ppb	0.10	10	PASS
Myclobutanil	88671-89-0	ND	ppb	0.10	9000	PASS
Imidacloprid	138261-41-3	ND	ppb	0.10	3000	PASS
Imazalil	35554-44-0	ND	ppb	0.10	10	PASS
Fenoxycarb	72490-01-8	ND	ppb	0.10	10	PASS
Etoxazole	153233-91-1	ND	ppb	0.10	1500	PASS
Daminozide	1596-84-5	ND	ppb	10.00	10	*
Cyfluthrin	68359-37-5	ND	ppb	0.50	1000	PASS
Bifenthrin	82657-04-3	ND	ppb	0.20	500	*
Bifenazate	149877-41-8	ND	ppb	0.10	5000	PASS
Azoxystrobin	131860-33-8	ND	ppb	0.10	40000	PASS
Abamectin B1b	65195-56-4	ND	ppb	0.20	300	*
Abamectin B1a	65495-55-3	ND	ppb	0.20	300	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.

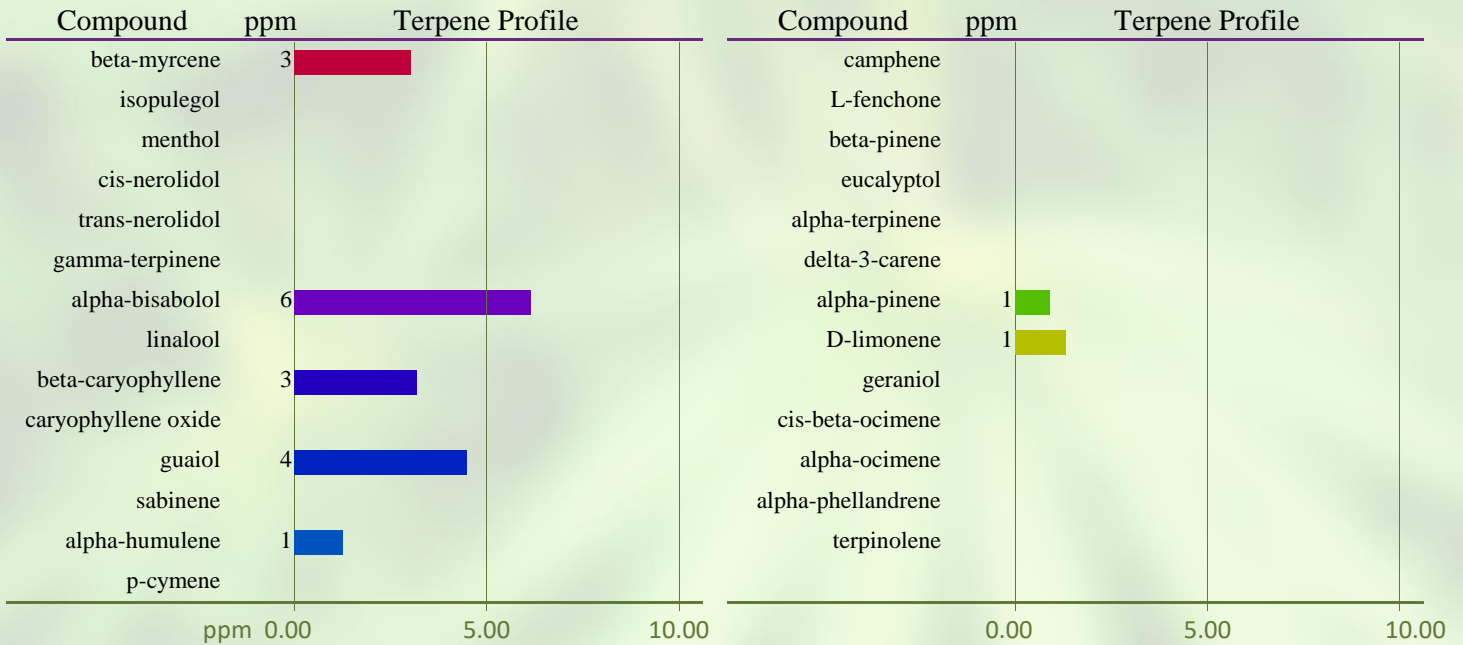
**TP: Terpenes Profile [WI-10-27]**

Analyst: CMA

Test Date: 5/4/2019

Client sample analysis was performed using full evaporative technique (FET) headspace sample delivery and gas chromatographic (GC) compound separation. A combination of flame ionization detection (FID) and/or mass spectrometric (MS) detection with mass spectral confirmation against the National Institute of Standards and Technology (NIST) Mass Spectral Database, Revision 2017 were used. Chromatographic and/or mass spectral data were processed by quantitatively comparing the analytical peak areas against calibration curves prepared from certified reference standards.

**53856-TP**



Total Terpene: <0.1 wt%

\* Certified reference standard not available for this compound. Concentration is estimated using the response factor from alpha-pinene. ND = None Detected. RL = Reporting Limit of 5 ppm.

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

Analyst: CMA

Test Date: 5/4/2019

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.

**53856-VC**

Compound	CAS	Amount <sup>1</sup>	Limit <sup>2</sup>	RL	Status
Propane	74-98-6	ND	1,000 ppm	200	PASS
Isobutane	75-28-5	ND	1,000 ppm	200	PASS
Butane	106-97-8	ND	1,000 ppm	200	PASS
Methanol	67-56-1	ND	3,000 ppm	200	PASS
Ethanol	64-17-5	380 ppm	5,000 ppm	200	PASS
Acetone	67-64-1	ND	5,000 ppm	200	PASS
Isopropanol	67-63-0	ND	5,000 ppm	200	PASS
Acetonitrile	75-05-8	ND	410 ppm	200	PASS
Hexane	110-54-3	ND	290 ppm	200	PASS
Heptane	142-82-5	ND	5,000 ppm	200	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**