

SAMPLE NAME: cbdMD Recover 4 oz 1500 mg Inflammation Cream Tub
Infused, Non-Inhalable

CULTIVATOR / MANUFACTURER

Business Name:
License Number:
Address:

DISTRIBUTOR

Business Name: cbdMD
License Number:
Address:



SAMPLE DETAIL

Batch Number: 20105REC
Sample ID: 200512U010

Date Collected: 05/12/2020
Date Received: 05/12/2020
Batch Size:
Sample Size: 1.0 Unit(s)
Unit Mass: 120 Grams per Unit
Serving Size:



Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: **Not Detected**

Total CBD: **1629.360 mg/unit**

Total Cannabinoids: **1636.920 mg/unit**

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

Total THC = $\Delta 9\text{THC} + (\text{THCa} \cdot 0.877)$
Total CBD = $\text{CBD} + (\text{CBDa} \cdot 0.877)$
Total Cannabinoids = $(\Delta 9\text{THC} + 0.877 \cdot \text{THCa}) + (\text{CBD} + 0.877 \cdot \text{CBDa}) + (\text{CBG} + 0.877 \cdot \text{CBGa}) + (\text{THCV} + 0.877 \cdot \text{THCVa}) + (\text{CBC} + 0.877 \cdot \text{CBCa}) + (\text{CBDV} + 0.877 \cdot \text{CBDVa}) + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$

Moisture: NT

Density: NT

Viscosity: NT

SAFETY ANALYSIS - SUMMARY

Pesticides: NT

Mycotoxins: NT

Residual Solvents: NT

Heavy Metals: NT

Microbial Impurities (PCR): **PASS**

Microbial Impurities (Plating): **ND**

Foreign Material: NT

Water Activity: NT

Vitamin E Acetate: NT

TERPENOID ANALYSIS - SUMMARY

35 TESTED, TOP 3 HIGHLIGHTED

Menthol 0.68 mg/g

Limonene 0.39 mg/g

α Pinene 0.33 mg/g


For quality assurance purposes. Not a Pre-Harvest Hemp Lab Test Report. These results relate only to the sample included on this report. This report shall not be reproduced, except in full, without written approval of the laboratory.

Sample Certification: California Code of Regulations Title 16 Effect Date January 16, 2019. Authority: Section 26013 Business and Professions Code. Reference: Sections 26100, 26104 and 26110, Business and Professions Code.

Decision Rule: Statements of conformity (e.g. Pass/Fail) to specifications are made in this report without taking measurement uncertainty into account. Where statements of conformity are made in this report, the following decision rules are applied: PASS - Results within limits/specifications, FAIL - Results exceed limits/specifications.

References: limit of detection (LOD), limit of quantification (LOQ), not detected (ND), not tested (NT)


LQC verified by: Josh Antunovich
Date: 05/16/2020


Approved by: Josh Wurzer, President
Date: 05/16/2020



CANNABINOID TEST RESULTS - 05/15/2020

Tested by high-performance liquid chromatography with diode-array detection (HPLC-DAD).

Method: QSP - (1157) Analysis of Cannabinoids by HPLC-DAD

TOTAL THC: Not Detected

Total THC ($\Delta 9\text{THC} + 0.877 * \text{THCa}$)

TOTAL CBD: 1629.360 mg/unit

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

TOTAL CANNABINOIDS: 1636.920 mg/unit

Total Cannabinoids (Total THC) + (Total CBD) + (Total CBG) + (Total THCV) + (Total CBC) + (Total CBDV) + $\Delta 8\text{THC}$ + CBL + CBN

TOTAL CBG: ND

Total CBG ($\text{CBG} + 0.877 * \text{CBGa}$)

TOTAL THCV: ND

Total THCV ($\text{THCV} + 0.877 * \text{THCVa}$)

TOTAL CBC: ND

Total CBC ($\text{CBC} + 0.877 * \text{CBCa}$)

TOTAL CBDV: 5.040 mg/unit

Total CBDV ($\text{CBDV} + 0.877 * \text{CBDVa}$)

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBD	0.004 / 0.011	± 0.6504	13.578	1.3578
CBDV	0.002 / 0.007	± 0.0022	0.042	0.0042
CBN	0.001 / 0.004	± 0.0008	0.021	0.0021
$\Delta 9\text{THC}$	0.002 / 0.005	N/A	ND	ND
$\Delta 8\text{THC}$	0.01 / 0.02	N/A	ND	ND
THCa	0.001 / 0.002	N/A	ND	ND
THCV	0.002 / 0.008	N/A	ND	ND
THCVa	0.002 / 0.005	N/A	ND	ND
CBDa	0.001 / 0.003	N/A	ND	ND
CBDVa	0.001 / 0.003	N/A	ND	ND
CBG	0.002 / 0.005	N/A	ND	ND
CBGa	0.002 / 0.006	N/A	ND	ND
CBL	0.003 / 0.008	N/A	ND	ND
CBC	0.003 / 0.010	N/A	ND	ND
CBCa	0.001 / 0.004	N/A	ND	ND
SUM OF CANNABINOIDS			13.641 mg/g	1.3641%

MOISTURE TEST RESULT

Not Tested

DENSITY TEST RESULT

Not Tested

VISCOSITY TEST RESULT

Not Tested

Unit Mass: 120 Grams per Unit / Serving Size:

$\Delta 9\text{THC}$ per Unit	1000.0 per-package limit	ND	PASS
$\Delta 9\text{THC}$ per Serving			
CBD per Unit		1629.360 mg/unit	
CBD per Serving			



Terpenoid Analysis

Terpene analysis utilizing gas chromatography-flame ionization detection (GC-FID). Terpenes are the aromatic compounds that endow cannabis with their unique scent and effect. Following are the primary terpenes detected.

Method: OSP - (1192) Analysis of Terpenoids by GC-FID

1 Menthol

A monoterpene alcohol with a fragrance that can be described as fresh, cool and herbal. It is responsible for the distinct odor of mint. It is frequently added to cigarettes and mouthwash as a flavorant. Found in mint, sunflower, micromeria, mountain mint, rose geranium, pennyroyal, tarragon, savory, basil, juniper, couch grass, rhubarb, acinos (basil thyme), ironwort, muña...etc.

2 Limonene

A monoterpene with a fragrance that can be described as orangey, citrusy, sweet and tart. It is most commonly found in nature as D-Limonene and is a primary contributor to the distinct scent of orange peels, from which it is commonly derived. Found in numerous pines, red maple, silver maple, aspens, cottonwoods, hemlocks, sumac, cedar, junipers...etc.

3 α Pinene

One of two isomers of the monoterpene Pinene, the most abundant terpene in the natural world. It is responsible for the distinct aroma of many coniferous trees, particularly pines, from which it derives its name. It is a primary constituent of turpentine. Found in pines, rose gun, parsley, frankincense, guava, juniper, rosemary, nutmeg, blue gum, valerian...etc.

TERPENOID TEST RESULTS - 05/14/2020

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
Menthol	0.03 / 0.09	±0.042	0.68	0.068
Limonene	0.02 / 0.05	±0.014	0.39	0.039
α Pinene	0.03 / 0.09	±0.022	0.33	0.033
Camphor	0.1 / 0.2	±0.01	0.3	0.03
Eucalyptol	0.03 / 0.08	±0.014	0.26	0.026
Camphene	0.04 / 0.11	±0.018	0.24	0.024
R-(+)-Pulegone	0.03 / 0.09	±0.013	0.21	0.021
Terpineol	0.02 / 0.07	±0.015	0.14	0.014
Linalool	0.03 / 0.08	±0.005	0.09	0.009
(-)-Isopulegol	0.02 / 0.05	±0.002	0.06	0.006
β Pinene	0.04 / 0.11	N/A	<LOQ	<LOQ
Borneol	0.1 / 0.2	N/A	<LOQ	<LOQ
Geraniol	0.02 / 0.07	N/A	<LOQ	<LOQ
β Caryophyllene	0.02 / 0.07	N/A	<LOQ	<LOQ
α Humulene	0.02 / 0.05	N/A	<LOQ	<LOQ
Sabinene	0.04 / 0.11	N/A	ND	ND
Myrcene	0.04 / 0.11	N/A	ND	ND
α Phellandrene	0.05 / 0.1	N/A	ND	ND
3 Carene	0.04 / 0.1	N/A	ND	ND
α Terpinene	0.04 / 0.1	N/A	ND	ND
Ocimene	0.03 / 0.09	N/A	ND	ND
γ Terpinene	0.04 / 0.1	N/A	ND	ND
Sabinene Hydrate	0.02 / 0.07	N/A	ND	ND
Fenchone	0.04 / 0.12	N/A	ND	ND
Terpinolene	0.03 / 0.09	N/A	ND	ND
Fenchol	0.03 / 0.09	N/A	ND	ND
Isoborneol	0.04 / 0.1	N/A	ND	ND
Nerol	0.03 / 0.09	N/A	ND	ND
Geranyl Acetate	0.02 / 0.06	N/A	ND	ND
α Cedrene	0.02 / 0.07	N/A	ND	ND
Valencene	0.01 / 0.03	N/A	ND	ND
Nerolidol	0.3 / 0.8	N/A	ND	ND
Caryophyllene Oxide	0.04 / 0.11	N/A	ND	ND
Guaiol	0.03 / 0.09	N/A	ND	ND
Cedrol	0.04 / 0.11	N/A	ND	ND
α Bisabolol	0.02 / 0.07	N/A	ND	ND
TOTAL TERPENOIDS			2.70 mg/g	0.27%



 **Microbial Impurities Analysis**
 PCR AND PLATING

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbial impurities.

Method: QSP - (1221) Analysis of Microbial Impurities

Analysis conducted by 3M™ Petrifilm™ and plate counts of microbial impurities.

Method: QSP - (6794) Plating with 3M™ Petrifilm™

MICROBIAL IMPURITIES TEST RESULTS (PCR) - 05/15/2020 ✔ PASS

COMPOUND	ACTION LIMIT	RESULT	RESULT
Shiga toxin-producing <i>Escherichia coli</i>	Detect	ND	PASS
<i>Salmonella</i> spp.	Detect	ND	PASS
<i>Aspergillus fumigatus</i>		NT	
<i>Aspergillus flavus</i>		NT	
<i>Aspergillus niger</i>		NT	
<i>Aspergillus terreus</i>		NT	

MICROBIAL IMPURITIES TEST RESULTS (PLATING) - 05/15/2020 ND

COMPOUND	RESULT (cfu/g)
Aerobic Plate Count	ND
Total Yeast and Mold	ND

