

SAMPLE NAME: cbdMD Daily Moisturizer 2 oz 600 mg
 Infused, Hemp Topical

CULTIVATOR / MANUFACTURER

Business Name:
 License Number:
 Address:

DISTRIBUTOR / TESTED FOR

Business Name: cbdMD
 License Number:
 Address:



SAMPLE DETAIL

Batch Number: 21305
 Sample ID: 211029P005

Date Collected: 10/29/2021
 Date Received: 10/29/2021
 Batch Size:
 Sample Size: 1.0 units
 Unit Mass: 56.699 grams per Unit
 Serving Size:



Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: **Not Detected**

Total CBD: **712.310 mg/unit**

Sum of Cannabinoids: 762.091 mg/unit

Total Cannabinoids: 762.092 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 = $\text{CBD} + (\text{CBDa} \cdot 0.877)$
 Sum of Cannabinoids = $\Delta 9\text{THC} + \text{THCa} + \text{CBD} + \text{CBDa} + \text{CBG} + \text{CBGa} + \text{THCV} + \text{THCVa} + \text{CBC} + \text{CBCa} + \text{CBDV} + \text{CBDVa} + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$
 Total Cannabinoids = $(\Delta 9\text{THC} + 0.877 \cdot \text{THCa}) + (\text{CBD} + 0.877 \cdot \text{CBDa}) + (\text{CBG} + 0.877 \cdot \text{CBGa}) + (\text{THCV} + 0.877 \cdot \text{THCVa}) + (\text{CBC} + 0.877 \cdot \text{CBCa}) + (\text{CBDV} + 0.877 \cdot \text{CBDVa}) + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$

TERPENOID ANALYSIS - SUMMARY

39 TESTED, TOP 3 HIGHLIGHTED

Total Terpenoids: **0.0369%**

β Caryophyllene 0.369 mg/g

SAFETY ANALYSIS - SUMMARY

Pesticides: **✓PASS**

Mycotoxins: **✓PASS**

Residual Solvents: **✓PASS**

Heavy Metals: **✓PASS**

Microbiology (PCR): **✓PASS**

Microbiology (Plating): **✓PASS**

Foreign Material: **✓PASS**

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: Action Limits used in this report are a compilation of guidance from state regulatory agencies in all states. Action limits for required tests are either state-specific, or the lower of any conflicting state regulations based upon the panel requested.

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), too numerous to count >250 cfu/plate (TNTC), colony-forming unit (cfu)

Lisa Johnson
 LAC verified by: Lisa Johnson
 Date: 11/02/2021

Josh Wurzer
 Approved by: Josh Wurzer, President
 Date: 11/02/2021



Cannabinoïd Analysis

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 ($\Delta 9$ THC+0.877*THCa)

TOTAL CBD: 712.310 mg/unit

Total CBD (CBD+0.877*CBDA)

TOTAL CANNABINOIDS: 762.092 mg/unit

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

TOTAL CBG: 28.123 mg/unit

Total CBG (CBG+0.877*CBGa)

TOTAL THCV: ND

Total THCV (THCV+0.877*THCVa)

TOTAL CBC: ND

Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: 2.892 mg/unit


Total CBDV (CBDV+0.877*CBDVa)

CANNABINOID TEST RESULTS - 10/31/2021

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBD	0.004 / 0.011	± 0.6018	12.563	1.2563
CBG	0.002 / 0.006	± 0.0309	0.496	0.0496
CBN	0.001 / 0.007	± 0.0122	0.331	0.0331
CBDV	0.002 / 0.012	± 0.0027	0.051	0.0051
$\Delta 9$ THC	0.002 / 0.014	N/A	ND	ND
$\Delta 8$ THC	0.01 / 0.02	N/A	ND	ND
THCa	0.001 / 0.005	N/A	ND	ND
THCV	0.002 / 0.012	N/A	ND	ND
THCVa	0.002 / 0.019	N/A	ND	ND
CBDA	0.001 / 0.026	N/A	ND	ND
CBDVa	0.001 / 0.018	N/A	ND	ND
CBGa	0.002 / 0.007	N/A	ND	ND
CBL	0.003 / 0.010	N/A	ND	ND
CBC	0.003 / 0.010	N/A	ND	ND
CBCa	0.001 / 0.015	N/A	ND	ND
SUM OF CANNABINOIDS			13.441 mg/g	1.3441%

Unit Mass: 56.699 grams per Unit

$\Delta 9$ THC per Unit	ND
Total THC per Unit	ND
CBD per Unit	712.310 mg/unit
Total CBD per Unit	712.310 mg/unit
Sum of Cannabinoids per Unit	762.091 mg/unit
Total Cannabinoids per Unit	762.092 mg/unit



Terpenoid Analysis

Terpene analysis utilizing gas chromatography-flame ionization detection (GC-FID).

Method: QSP 1192 - Analysis of Terpenoids by GC-FID

TERPENOID TEST RESULTS - 10/30/2021

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
β Caryophyllene	0.004 / 0.012	± 0.0131	0.369	0.0369
α Pinene	0.005 / 0.017	N/A	ND	ND
Camphene	0.005 / 0.015	N/A	ND	ND
Sabinene	0.004 / 0.014	N/A	ND	ND
β Pinene	0.004 / 0.014	N/A	ND	ND
Myrcene	0.008 / 0.025	N/A	ND	ND
α Phellandrene	0.006 / 0.020	N/A	ND	ND
3 Carene	0.005 / 0.018	N/A	ND	ND
α Terpinene	0.005 / 0.017	N/A	ND	ND
p-Cymene	0.005 / 0.016	N/A	ND	ND
Limonene	0.005 / 0.016	N/A	ND	ND

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 **Terpenoid Analysis** *Continued*

Terpene analysis utilizing gas chromatography-flame ionization detection (GC-FID).


Method: QSP 1192 - Analysis of Terpenoids by GC-FID

1 β **Caryophyllene**

A sesquiterpene with a fragrance that can be described as spicy, woody, dry, dusty and mildly sweet. It was one of the first organic compounds to fully synthesized in a laboratory and plays a role in the endocannabinoid system as it is a functional CB₂ receptor agonist. Found in black pepper, clove, hops, rosemary, black-jack, perilla, spicebush, Indian pennywort, celery, frankincense, vitex, parsley, marigold, tamarind...etc.

TERPENOID TEST RESULTS - 10/30/2021 *continued*

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
Eucalyptol	0.006 / 0.018	N/A	ND	ND
Ocimene	0.011 / 0.038	N/A	ND	ND
γ Terpinene	0.006 / 0.018	N/A	ND	ND
Sabinene Hydrate	0.006 / 0.022	N/A	ND	ND
Fenchone	0.009 / 0.028	N/A	ND	ND
Terpinolene	0.008 / 0.026	N/A	ND	ND
Linalool	0.009 / 0.032	N/A	ND	ND
Fenchol	0.010 / 0.034	N/A	ND	ND
(-)-Isopulegol	0.005 / 0.016	N/A	ND	ND
Camphor	0.006 / 0.019	N/A	ND	ND
Isoborneol	0.004 / 0.012	N/A	ND	ND
Borneol	0.005 / 0.016	N/A	ND	ND
Menthol	0.008 / 0.025	N/A	ND	ND
Terpineol	0.016 / 0.055	N/A	ND	ND
Nerol	0.003 / 0.011	N/A	ND	ND
Citronellol	0.003 / 0.010	N/A	ND	ND
R-(+)-Pulegone	0.003 / 0.011	N/A	ND	ND
Geraniol	0.002 / 0.007	N/A	ND	ND
Geranyl Acetate	0.004 / 0.014	N/A	ND	ND
α Cedrene	0.005 / 0.016	N/A	ND	ND
trans- β -Farnesene	0.008 / 0.025	N/A	ND	ND
α Humulene	0.009 / 0.029	N/A	ND	ND
Valencene	0.009 / 0.030	N/A	ND	ND
Nerolidol	0.009 / 0.028	N/A	ND	ND
Caryophyllene Oxide	0.010 / 0.033	N/A	ND	ND
Guaiol	0.009 / 0.030	N/A	ND	ND
Cedrol	0.008 / 0.027	N/A	ND	ND
α Bisabolol	0.008 / 0.026	N/A	ND	ND
TOTAL TERPENOIDS			0.369 mg/g	0.0369%

 **Pesticide Analysis**

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS).

*GC-MS utilized where indicated.

Method: QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS or QSP 1213 - Analysis of Pesticides by GC-MS



PESTICIDE TEST RESULTS - 10/31/2021 ✔ PASS

COMPOUND	LOD/LOQ (μ g/g)	ACTION LIMIT (μ g/g)	MEASUREMENT UNCERTAINTY (μ g/g)	RESULT (μ g/g)	RESULT
Abamectin	0.03 / 0.10	0.3	N/A	ND	PASS
Acephate	0.02 / 0.07	5	N/A	ND	PASS
Acequinocyl	0.02 / 0.07	4	N/A	ND	PASS
Acetamiprid	0.02 / 0.05	5	N/A	ND	PASS
Aldicarb	0.03 / 0.08	\geq LOD	N/A	ND	PASS
Azoxystrobin	0.02 / 0.07	40	N/A	ND	PASS
Bifenazate	0.01 / 0.04	5	N/A	ND	PASS

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Pesticide Analysis *Continued*

PESTICIDE TEST RESULTS - 10/31/2021 *continued* ✔ **PASS**

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS).

*GC-MS utilized where indicated.

Method: QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS or QSP 1213 - Analysis of Pesticides by GC-MS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Bifenthrin	0.02 / 0.05	0.5	N/A	ND	PASS
Boscalid	0.03 / 0.09	10	N/A	ND	PASS
Captan	0.19 / 0.57	5	N/A	ND	PASS
Carbaryl	0.02 / 0.06	0.5	N/A	ND	PASS
Carbofuran	0.02 / 0.05	≥ LOD	N/A	ND	PASS
Chlorantraniliprole	0.04 / 0.12	40	N/A	ND	PASS
Chlordane*	0.03 / 0.08	≥ LOD	N/A	ND	PASS
Chlorfenapyr*	0.03 / 0.10	≥ LOD	N/A	ND	PASS
Chlorpyrifos	0.02 / 0.06	≥ LOD	N/A	ND	PASS
Clofentezine	0.03 / 0.09	0.5	N/A	ND	PASS
Coumaphos	0.02 / 0.07	≥ LOD	N/A	ND	PASS
Cyfluthrin	0.12 / 0.38	1	N/A	ND	PASS
Cypermethrin	0.11 / 0.32	1	N/A	ND	PASS
Daminozide	0.02 / 0.07	≥ LOD	N/A	ND	PASS
DDVP (Dichlorvos)	0.03 / 0.09	≥ LOD	N/A	ND	PASS
Diazinon	0.02 / 0.05	0.2	N/A	ND	PASS
Dimethoate	0.03 / 0.08	≥ LOD	N/A	ND	PASS
Dimethomorph	0.03 / 0.09	20	N/A	ND	PASS
Ethoprop(hos)	0.03 / 0.10	≥ LOD	N/A	ND	PASS
Etofenprox	0.02 / 0.06	≥ LOD	N/A	ND	PASS
Etoxazole	0.02 / 0.06	1.5	N/A	ND	PASS
Fenhexamid	0.03 / 0.09	10	N/A	ND	PASS
Fenoxycarb	0.03 / 0.08	≥ LOD	N/A	ND	PASS
Fenpyroximate	0.02 / 0.06	2	N/A	ND	PASS
Fipronil	0.03 / 0.08	≥ LOD	N/A	ND	PASS
Flonicamid	0.03 / 0.10	2	N/A	ND	PASS
Fludioxonil	0.03 / 0.10	30	N/A	ND	PASS
Hexythiazox	0.02 / 0.07	2	N/A	ND	PASS
Imazalil	0.02 / 0.06	≥ LOD	N/A	ND	PASS
Imidacloprid	0.04 / 0.11	3	N/A	ND	PASS
Kresoxim-methyl	0.02 / 0.07	1	N/A	ND	PASS
Malathion	0.03 / 0.09	5	N/A	ND	PASS
Metalaxyl	0.02 / 0.07	15	N/A	ND	PASS
Methiocarb	0.02 / 0.07	≥ LOD	N/A	ND	PASS
Methomyl	0.03 / 0.10	0.1	N/A	ND	PASS
Methyl parathion	0.03 / 0.10	≥ LOD	N/A	ND	PASS
Mevinphos	0.03 / 0.09	≥ LOD	N/A	ND	PASS
Myclobutanil	0.03 / 0.09	9	N/A	ND	PASS
Naled	0.02 / 0.07	0.5	N/A	ND	PASS
Oxamyl	0.04 / 0.11	0.2	N/A	ND	PASS
Paclobutrazol	0.02 / 0.05	≥ LOD	N/A	ND	PASS

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 **Pesticide Analysis** *Continued*

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS).

*GC-MS utilized where indicated.

Method: QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS or QSP 1213 - Analysis of Pesticides by GC-MS

PESTICIDE TEST RESULTS - 10/31/2021 *continued* 

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Pentachloronitrobenzene*	0.03 / 0.09	0.2	N/A	ND	PASS
Permethrin	0.04 / 0.12	20	N/A	ND	PASS
Phosmet	0.03 / 0.10	0.2	N/A	ND	PASS
Piperonylbutoxide	0.02 / 0.07	8	N/A	ND	PASS
Prallethrin	0.03 / 0.08	0.4	N/A	ND	PASS
Propiconazole	0.02 / 0.07	20	N/A	ND	PASS
Propoxur	0.03 / 0.09	≥ LOD	N/A	ND	PASS
Pyrethrins	0.04 / 0.12	1	N/A	ND	PASS
Pyridaben	0.02 / 0.07	3	N/A	ND	PASS
Spinetoram	0.02 / 0.07	3	N/A	ND	PASS
Spinosad	0.02 / 0.07	3	N/A	ND	PASS
Spiromesifen	0.02 / 0.05	12	N/A	ND	PASS
Spirotetramat	0.02 / 0.06	13	N/A	ND	PASS
Spiroxamine	0.03 / 0.08	≥ LOD	N/A	ND	PASS
Tebuconazole	0.02 / 0.07	2	N/A	ND	PASS
Thiacloprid	0.03 / 0.10	≥ LOD	N/A	ND	PASS
Thiamethoxam	0.03 / 0.10	4.5	N/A	ND	PASS
Trifloxystrobin	0.03 / 0.08	30	N/A	ND	PASS

 **Mycotoxin Analysis**


Mycotoxin analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS).

Method: QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS

Exclusions³ see last page

MYCOTOXIN TEST RESULTS - 10/31/2021 


COMPOUND	LOD/LOQ (µg/kg)	ACTION LIMIT (µg/kg)	MEASUREMENT UNCERTAINTY (µg/kg)	RESULT (µg/kg)	RESULT
Aflatoxin B1	2.0 / 6.0		N/A	ND	
Aflatoxin B2	1.8 / 5.6		N/A	ND	
Aflatoxin G1	1.0 / 3.1		N/A	ND	
Aflatoxin G2	1.2 / 3.5		N/A	ND	
Total Aflatoxin		20		ND	PASS
Ochratoxin A	6.3 / 19.2		N/A	ND	

 **Residual Solvents Analysis**

Residual Solvent analysis utilizing gas chromatography-mass spectrometry (GC-MS).

Method: QSP 1204 - Analysis of Residual Solvents by GC-MS


Exclusions⁴ see last page

RESIDUAL SOLVENTS TEST RESULTS - 11/01/2021 

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Propane	10 / 20	5000	N/A	ND	PASS
Butane	10 / 50	5000	N/A	ND	PASS
Pentane	20 / 50	5000	N/A	ND	PASS
Hexane	2 / 5	290	N/A	ND	PASS
Heptane	20 / 60	5000	N/A	ND	PASS
Benzene	0.03 / 0.09	1	N/A	ND	PASS
Toluene	7 / 21	890	N/A	ND	PASS

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 **Residual Solvents Analysis**
Continued

Residual Solvent analysis utilizing gas chromatography-mass spectrometry (GC-MS).

Method: QSP 1204 - Analysis of Residual Solvents by GC-MS

RESIDUAL SOLVENTS TEST RESULTS - 11/01/2021 ✔ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Total Xylenes	50 / 160	2170	N/A	ND	PASS
Methanol	50 / 200	3000	N/A	ND	PASS
Ethanol	20 / 50		N/A	ND	
Isopropyl Alcohol	10 / 40		N/A	<LOQ	
Acetone	20 / 50	5000	N/A	ND	PASS
Ethyl ether	20 / 50	5000	N/A	ND	PASS
Ethylene Oxide	0.3 / 0.8	1	N/A	ND	PASS
Ethyl acetate	20 / 60	5000	N/A	ND	PASS
Chloroform	0.1 / 0.2	1	N/A	ND	PASS
Methylene chloride	0.3 / 0.9	1	N/A	ND	PASS
Trichloroethylene	0.1 / 0.3	1	N/A	ND	PASS
1,2-Dichloroethane	0.05 / 0.1	1	N/A	ND	PASS
Acetonitrile	2 / 7	410	N/A	ND	PASS

 **Heavy Metals Analysis**

Heavy metal analysis utilizing inductively coupled plasma-mass spectrometry (ICP-MS).

Method: QSP 1160 - Analysis of Heavy Metals by ICP-MS

HEAVY METALS TEST RESULTS - 10/30/2021 ✔ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Arsenic	0.02 / 0.1	0.42	N/A	ND	PASS
Cadmium	0.02 / 0.05	0.27	N/A	ND	PASS
Lead	0.04 / 0.1	0.5	N/A	ND	PASS
Mercury	0.002 / 0.01	0.4	N/A	ND	PASS

 **Microbiology Analysis**

PCR AND PLATING

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbiological contaminants.

Method: QSP 1221 - Analysis of Microbiological Contaminants

MICROBIOLOGY TEST RESULTS (PCR) - 11/02/2021 ✔ PASS

COMPOUND	ACTION LIMIT	RESULT	RESULT
Shiga toxin-producing <i>Escherichia coli</i>	Not Detected in 1g	ND	PASS
<i>Salmonella</i> spp.	Not Detected in 1g	ND	PASS
<i>Listeria monocytogenes</i>	Not Detected in 1g	ND	PASS

Analysis conducted by 3M™ Petrifilm™ and plate counts of microbiological contaminants.

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

MICROBIOLOGY TEST RESULTS (PLATING) - 11/02/2021 ✔ PASS

COMPOUND	ACTION LIMIT (cfu/g)	RESULT (cfu/g)	RESULT
Total Aerobic Bacteria	100	ND	PASS
Total Yeast and Mold	10	ND	PASS



 **Foreign Material Analysis**

FOREIGN MATERIAL TEST RESULTS - 10/30/2021  **PASS**

Visual analysis includes, but is not limited to, sand, soil, cinders, dirt, mold, hair, insect fragments, and mammalian excreta.

Method: QSP 1226 - Analysis of Foreign Material in Cannabis and Cannabis Products

COMPOUND	ACTION LIMIT	RESULT
Total Sample Area Covered by Sand, Soil, Cinders, or Dirt	>25%	PASS
Total Sample Area Covered by Mold	>25%	PASS
Total Sample Area Covered by an Imbedded Foreign Material	>25%	PASS
Insect Fragment Count	> 1 per 3 grams	PASS
Hair Count	> 1 per 3 grams	PASS
Mammalian Excreta Count	> 1 per 3 grams	PASS

NOTES

- Exclusions: QSP 1213 - Sample Certification: California Code of Regulation Title 4 Division 19
- Exclusions: QSP 1212 - Sample Certification: California Code of Regulation Title 4 Division 19
- Exclusions: Sample Certification: California Code of Regulation Title 4 Division 19 : Ochratoxin A - Action Limit: 20 µg/kg
- Exclusions: Sample Certification: California Code of Regulation Title 4 Division 19

