

**SAMPLE NAME:** cbdMD Full Spectrum Tincture 30 mL Chocolate Mint 1500 mg  
Infused, Hemp Infused

**CULTIVATOR / MANUFACTURER**

**Business Name:**  
**License Number:**  
**Address:**

**DISTRIBUTOR / TESTED FOR**

**Business Name:** cbdMD  
**License Number:**  
**Address:**



**SAMPLE DETAIL**

**Batch Number:** 12601D5  
**Sample ID:** 210918R005

**Date Collected:** 09/18/2021  
**Date Received:** 09/18/2021  
**Batch Size:**  
**Sample Size:** 1.0 units  
**Unit Mass:** 30 milliliters per Unit  
**Serving Size:** 1 milliliters per Serving



Scan QR code to verify authenticity of results.

**CANNABINOID ANALYSIS - SUMMARY**

**Total THC:** 39.810 mg/unit

**Total CBD:** 1616.310 mg/unit

**Sum of Cannabinoids:** 1744.980 mg/unit

**Total Cannabinoids:** 1744.980 mg/unit

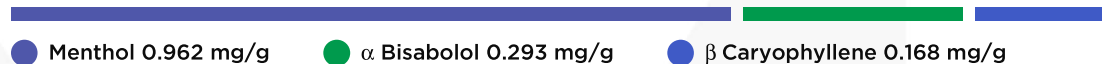
Total THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during the decarboxylation step:  
Total THC =  $\Delta 9\text{THC} + (\text{THCa} \cdot 0.877)$   
Total CBD =  $\text{CBD} + (\text{CBDa} \cdot 0.877)$   
Sum of Cannabinoids =  $\Delta 9\text{THC} + \text{THCa} + \text{CBD} + \text{CBDa} + \text{CBG} + \text{CBGa} + \text{THCV} + \text{THCVa} + \text{CBC} + \text{CBCa} + \text{CBDV} + \text{CBDVa} + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$   
Total Cannabinoids =  $(\Delta 9\text{THC} + 0.877 \cdot \text{THCa}) + (\text{CBD} + 0.877 \cdot \text{CBDa}) + (\text{CBG} + 0.877 \cdot \text{CBGa}) + (\text{THCV} + 0.877 \cdot \text{THCVa}) + (\text{CBC} + 0.877 \cdot \text{CBCa}) + (\text{CBDV} + 0.877 \cdot \text{CBDVa}) + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$

**Density:** 0.9518 g/mL

**TERPENOID ANALYSIS - SUMMARY**

39 TESTED, TOP 3 HIGHLIGHTED

**Total Terpenoids:** 0.212%



**SAFETY ANALYSIS - SUMMARY**

**Pesticides:** ✔ PASS

**Mycotoxins:** ✔ PASS

**Residual Solvents:** ✔ PASS

**Heavy Metals:** ✔ PASS

**Microbiology (PCR):** ✔ PASS

**Microbiology (Plating):** ✔ 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)



LQC verified by: Michael Pham  
Date: 09/22/2021



Approved by: Josh Wurzer, President  
Date: 09/22/2021



CANNABINOID TEST RESULTS - 09/19/2021

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

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

**TOTAL THC: 39.810 mg/unit**

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

**TOTAL CBD: 1616.310 mg/unit**

Total CBD (CBD+0.877\*CBDA)

**TOTAL CANNABINOIDS: 1744.980 mg/unit**

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

**TOTAL CBG: 21.300 mg/unit**

Total CBG (CBG+0.877\*CBGa)

**TOTAL THCV: ND**

Total THCV (THCV+0.877\*THCVa)

**TOTAL CBC: 51.000 mg/unit**

Total CBC (CBC+0.877\*CBCa)

**TOTAL CBDV: 7.440 mg/unit**

Total CBDV (CBDV+0.877\*CBDVa)

COMPOUND	LOD/LOQ (mg/mL)	MEASUREMENT UNCERTAINTY (mg/mL)	RESULT (mg/mL)	RESULT (%)
CBD	0.004 / 0.011	±2.5807	53.877	5.6605
CBC	0.003 / 0.010	±0.0704	1.700	0.1786
$\Delta 9$ THC	0.002 / 0.014	±0.0936	1.327	0.1394
CBG	0.002 / 0.006	±0.0442	0.710	0.0746
CBDV	0.002 / 0.012	±0.0130	0.248	0.0261
CBN	0.001 / 0.007	±0.0080	0.216	0.0227
CBL	0.003 / 0.010	±0.0042	0.088	0.0092
THCa	0.001 / 0.005	N/A	ND	ND
$\Delta 8$ THC	0.01 / 0.02	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
CBCa	0.001 / 0.015	N/A	ND	ND
<b>SUM OF CANNABINOIDS</b>			<b>58.166 mg/mL</b>	<b>6.1112%</b>

Unit Mass: 30 milliliters per Unit / Serving Size: 1 milliliters per Serving

$\Delta 9$ THC per Unit	39.810 mg/unit
$\Delta 9$ THC per Serving	1.327 mg/serving
Total THC per Unit	39.810 mg/unit
Total THC per Serving	1.327 mg/serving
CBD per Unit	1616.310 mg/unit
CBD per Serving	53.877 mg/serving
Total CBD per Unit	1616.310 mg/unit
Total CBD per Serving	53.877 mg/serving
Sum of Cannabinoids per Unit	1744.980 mg/unit
Sum of Cannabinoids per Serving	58.166 mg/serving
Total Cannabinoids per Unit	1744.980 mg/unit
Total Cannabinoids per Serving	58.166 mg/serving

DENSITY TEST RESULT

0.9518 g/mL

Tested 09/19/2021

Method: QSP 7870 - Sample Preparation



## Terpenoid Analysis

TERPENOID TEST RESULTS - 09/19/2021

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

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

### 1 Menthol

A monoterpenoid 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 $\alpha$ Bisabolol

A sesquiterpene alcohol with a fragrance that can be described as floral, peppery, sweet and clean. Found in chamomile, figwort, yarrow, skullcaps, lavender, ironwort, germander...etc.

### 3 $\beta$ 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 CB<sub>2</sub> receptor agonist. Found in black pepper, clove, hops, rosemary, black-jack, perilla, spicebush, Indian pennywort, celery, frankincense, vitex, parsley, marigold, tamarind...etc.

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
Menthol	0.008 / 0.025	±0.0385	0.962	0.0962
$\alpha$ Bisabolol	0.008 / 0.026	±0.0156	0.293	0.0293
$\beta$ Caryophyllene	0.004 / 0.012	±0.0060	0.168	0.0168
Eucalyptol	0.006 / 0.018	±0.0037	0.145	0.0145
Guaial	0.009 / 0.030	±0.0067	0.141	0.0141
Borneol	0.005 / 0.016	±0.0038	0.090	0.0090
Caryophyllene Oxide	0.010 / 0.033	±0.0037	0.080	0.0080
Limonene	0.005 / 0.016	±0.0008	0.059	0.0059
$\alpha$ Humulene	0.009 / 0.029	±0.0017	0.054	0.0054
R-(+)-Pulegone	0.003 / 0.011	±0.0020	0.049	0.0049
$\beta$ Pinene	0.004 / 0.014	±0.0003	0.030	0.0030
Nerolidol	0.009 / 0.028	±0.0018	0.028	0.0028
$\alpha$ Pinene	0.005 / 0.017	±0.0002	0.021	0.0021
Sabinene	0.004 / 0.014	N/A	<LOQ	<LOQ
$\gamma$ Terpinene	0.006 / 0.018	N/A	<LOQ	<LOQ
Sabinene Hydrate	0.006 / 0.022	N/A	<LOQ	<LOQ
Terpineol	0.016 / 0.055	N/A	<LOQ	<LOQ
trans- $\beta$ -Farnesene	0.008 / 0.025	N/A	<LOQ	<LOQ
Camphene	0.005 / 0.015	N/A	ND	ND
Myrcene	0.008 / 0.025	N/A	ND	ND
$\alpha$ Phellandrene	0.006 / 0.020	N/A	ND	ND
3 Carene	0.005 / 0.018	N/A	ND	ND
$\alpha$ Terpinene	0.005 / 0.017	N/A	ND	ND
p-Cymene	0.005 / 0.016	N/A	ND	ND
Ocimene	0.011 / 0.038	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
Nerol	0.003 / 0.011	N/A	ND	ND
Citronellol	0.003 / 0.010	N/A	ND	ND
Geraniol	0.002 / 0.007	N/A	ND	ND
Geranyl Acetate	0.004 / 0.014	N/A	ND	ND
$\alpha$ Cedrene	0.005 / 0.016	N/A	ND	ND
Valencene	0.009 / 0.030	N/A	ND	ND
Cedrol	0.008 / 0.027	N/A	ND	ND
<b>TOTAL TERPENOIDS</b>			<b>2.120 mg/g</b>	<b>0.212%</b>

