

**SAMPLE NAME:** cbdMD Full Spectrum Tincture 30 mL Chocolate Mint 3000 mg  
Infused, Hemp Infused

**CULTIVATOR / MANUFACTURER**

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

**DISTRIBUTOR / TESTED FOR**

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



**SAMPLE DETAIL**

**Batch Number:** 12601D6  
**Sample ID:** 210918R006

**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:** 40.590 mg/unit

**Total CBD:** 3281.490 mg/unit

**Sum of Cannabinoids:** 3420.690 mg/unit

**Total Cannabinoids:** 3420.690 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:** 0.9559 g/mL

**TERPENOID ANALYSIS - SUMMARY**

39 TESTED, TOP 3 HIGHLIGHTED

**Total Terpenoids:** 0.2174%

● Menthol 0.972 mg/g ●  $\alpha$  Bisabolol 0.316 mg/g ●  $\beta$  Caryophyllene 0.166 mg/g

**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: 40.590 mg/unit**

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

**TOTAL CBD: 3281.490 mg/unit**

Total CBD (CBD+0.877\*CBDA)

**TOTAL CANNABINOIDS: 3420.690 mg/unit**

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

**TOTAL CBG: 21.360 mg/unit**

Total CBG (CBG+0.877\*CBGa)

**TOTAL THCV: ND**

Total THCV (THCV+0.877\*THCVa)

**TOTAL CBC: 52.500 mg/unit**

Total CBC (CBC+0.877\*CBCa)

**TOTAL CBDV: 15.690 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	$\pm 5.2394$	109.383	11.4429
CBC	0.003 / 0.010	$\pm 0.0724$	1.750	0.1831
$\Delta 9$ THC	0.002 / 0.014	$\pm 0.0954$	1.353	0.1415
CBG	0.002 / 0.006	$\pm 0.0443$	0.712	0.0745
CBDV	0.002 / 0.012	$\pm 0.0274$	0.523	0.0547
CBN	0.001 / 0.007	$\pm 0.0078$	0.211	0.0221
CBL	0.003 / 0.010	$\pm 0.0043$	0.091	0.0095
$\Delta 8$ 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
THCa	0.001 / 0.005	N/A	ND	ND
<b>SUM OF CANNABINOIDS</b>			114.023 mg/mL	11.9283%

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

$\Delta 9$ THC per Unit	40.590 mg/unit
$\Delta 9$ THC per Serving	1.353 mg/serving
Total THC per Unit	40.590 mg/unit
Total THC per Serving	1.353 mg/serving
CBD per Unit	3281.490 mg/unit
CBD per Serving	109.383 mg/serving
Total CBD per Unit	3281.490 mg/unit
Total CBD per Serving	109.383 mg/serving
Sum of Cannabinoids per Unit	3420.690 mg/unit
Sum of Cannabinoids per Serving	114.023 mg/serving
Total Cannabinoids per Unit	3420.690 mg/unit
Total Cannabinoids per Serving	114.023 mg/serving

DENSITY TEST RESULT

0.9559 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 α 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 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 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	±0.0389	0.972	0.0972
α Bisabolol	0.008 / 0.026	±0.0169	0.316	0.0316
β Caryophyllene	0.004 / 0.012	±0.0059	0.166	0.0166
Eucalyptol	0.006 / 0.018	±0.0038	0.149	0.0149
Guaiol	0.009 / 0.030	±0.0066	0.140	0.0140
Caryophyllene Oxide	0.010 / 0.033	±0.0040	0.088	0.0088
Borneol	0.005 / 0.016	±0.0037	0.087	0.0087
Limonene	0.005 / 0.016	±0.0009	0.064	0.0064
α Humulene	0.009 / 0.029	±0.0018	0.057	0.0057
R-(+)-Pulegone	0.003 / 0.011	±0.0020	0.050	0.0050
Nerolidol	0.009 / 0.028	±0.0021	0.033	0.0033
β Pinene	0.004 / 0.014	±0.0004	0.031	0.0031
α Pinene	0.005 / 0.017	±0.0002	0.021	0.0021
Sabinene	0.004 / 0.014	N/A	<LOQ	<LOQ
γ 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-β-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
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
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
α 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>2.174 mg/g</b>	<b>0.2174%</b>

