

SAMPLE NAME: CBD Stick Tincture

Infused, Non-Inhalable

CULTIVATOR / MANUFACTURER

Business Name:

License Number:

Address:

DISTRIBUTOR / TESTED FOR

Business Name: Sisters Of The Valley

License Number:

Address:
Merced CA 95348



SAMPLE DETAIL

Batch Number: Rowan Moon Feb 2021

Sample ID: 210302V002

Date Collected: 03/02/2021

Date Received: 03/02/2021

Batch Size:

Sample Size: 29.6 units

Unit Mass: 26.344 grams per Unit

Serving Size:



Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: 14.357 mg/unit

Total CBD: 400.086 mg/unit

Sum of Cannabinoids: 447.506 mg/unit

Total Cannabinoids: 442.077 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 = $(\Delta 9\text{THC} + 0.877 \cdot \text{THCa}) + (\text{CBD} + 0.877 \cdot \text{CBDa}) + (\text{CBG} + 0.877 \cdot \text{CBGa}) + (\text{THCV} + 0.877 \cdot \text{THCVa}) + (\text{CBC} + 0.877 \cdot \text{CBCa}) + (\text{CBDV} + 0.877 \cdot \text{CBDVa}) + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$

Moisture: NT

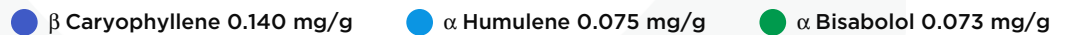
Density: 0.89 g/mL

Viscosity: NT

TERPENOID ANALYSIS - SUMMARY

39 TESTED, TOP 3 HIGHLIGHTED

Total Terpenoids: 0.0324%



SAFETY ANALYSIS - SUMMARY

$\Delta 9\text{THC}$ per Unit: ✔ PASS

Pesticides: NT

Heavy Metals: NT

Foreign Material: NT

Mycotoxins: NT

Microbial Impurities (PCR): NT

Water Activity: NT

Residual Solvents: NT

Microbial Impurities (Plating): NT

Vitamin E Acetate: NT

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: *Reza Naemeh*
Date: 03/05/2021

Approved by: *Josh Wurzer*, President
Date: 03/05/2021



CANNABINOID TEST RESULTS - 03/04/2021

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

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

TOTAL THC: 14.357 mg/unit

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

TOTAL CBD: 400.086 mg/unit

Total CBD (CBD+0.877*CBDA)

TOTAL CANNABINOIDS: 442.077 mg/unit

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

TOTAL CBG: 10.353 mg/unit

Total CBG (CBG+0.877*CBGa)

TOTAL THCV: ND

Total THCV (THCV+0.877*THCVa)

TOTAL CBC: 14.226 mg/unit

Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: 1.844 mg/unit

Total CBDV (CBDV+0.877*CBDVa)

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBD	0.004 / 0.011	±0.6633	13.847	1.3847
CBDA	0.001 / 0.026	±0.0558	1.528	0.1528
$\Delta 9$ THC	0.002 / 0.014	±0.0368	0.522	0.0522
CBC	0.003 / 0.010	±0.0203	0.490	0.0490
CBG	0.002 / 0.006	±0.0210	0.337	0.0337
CBDV	0.002 / 0.012	±0.0037	0.070	0.0070
CBGa	0.002 / 0.007	±0.0019	0.064	0.0064
CBCa	0.001 / 0.015	±0.0028	0.057	0.0057
CBL	0.003 / 0.010	±0.0016	0.033	0.0033
THCa	0.001 / 0.005	±0.0006	0.026	0.0026
CBN	0.001 / 0.007	±0.0005	0.013	0.0013
CBDVa	0.001 / 0.018	N/A	<LOQ	<LOQ
$\Delta 8$ 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
SUM OF CANNABINOIDS			16.987 mg/g	1.6987%

Unit Mass: 26.344 grams per Unit

$\Delta 9$ THC per Unit	1120 per-package limit	13.752 mg/unit	PASS
Total THC per Unit		14.357 mg/unit	
CBD per Unit		364.785 mg/unit	
Total CBD per Unit		400.086 mg/unit	
Sum of Cannabinoids per Unit		447.506 mg/unit	
Total Cannabinoids per Unit		442.077 mg/unit	

MOISTURE TEST RESULT

Not Tested

DENSITY TEST RESULT

0.89 g/mL
Tested 03/04/2021
Method: QSP 7870 - Sample Preparation

VISCOSITY TEST RESULT

Not Tested



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: 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.

2 α Humulene

Also known as α -caryophyllene, it is an isomer of the sesquiterpene β -Caryophyllene which frequently occurs in nature with many aromatic plants across the globe. It has a fragrance that can be described as earthy or musky with spicy undertones. Found in hops, forskohlii, skullcaps, basil, nutmeg, cloves, sage, cotton, tamarind, black pepper, guava, Scotch pine...etc.

3 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.

TERPENOID TEST RESULTS - 03/05/2021

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
β Caryophyllene	0.004 / 0.012	± 0.0050	0.140	0.0140
α Humulene	0.009 / 0.029	± 0.0024	0.075	0.0075
α Bisabolol	0.008 / 0.026	± 0.0039	0.073	0.0073
Linalool	0.009 / 0.032	± 0.0014	0.036	0.0036
Borneol	0.005 / 0.016	N/A	<LOQ	<LOQ
trans- β -Farnesene	0.008 / 0.025	N/A	<LOQ	<LOQ
Nerolidol	0.009 / 0.028	N/A	<LOQ	<LOQ
Caryophyllene Oxide	0.010 / 0.033	N/A	<LOQ	<LOQ
Guaiol	0.009 / 0.030	N/A	<LOQ	<LOQ
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
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
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
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
Valencene	0.009 / 0.030	N/A	ND	ND
Cedrol	0.008 / 0.027	N/A	ND	ND
TOTAL TERPENOIDS			0.324 mg/g	0.0324%

