

Product:	500 MG Whole Plant Infusion	Harvest Source:	Sugar Bottom Hemp Company
Description:	Hemp derived CBD rich whole plant extract in organic coconut oil	Cultivar:	Peacemaker, Cascade Blend
Unit Size:	30 mL	Batch ID:	1922019002
Serving Size:	1 mL	Production ID:	PS200330181
Product Code:	W16MN-30	DOM:	30-Mar-20

Quality	Method	Specification	Result	Result
Total CBD:	C5210-HPLCUV (Internal)	500 - 580 MG	534	PASS
Total THC:	C5210-HPLCUV (Internal)	< 0.30	0.07	PASS
Appearance:	ASTM E1627 - 11	Light amber viscous liquid		PASS
Odor:	ASTM E1627 - 11	Floral, earthy		PASS
Total Terpenes:	C5933-GCMS (Internal)	> 20 PPM	64	PASS
Minor Cannabinoids:	C6198 LCMSMS (Internal)	> 25 MG	90	PASS
Safety	Method	Specification	Result	Result
Water Activity	D8196-18	< 0.600	0.407	PASS
Solvents:	C5923-GCMS (Internal)	USP 467		PASS
Pesticides:	C5838 LCMSMS/AOAC 2007.01	OAR333-007-0400/EPA		PASS
Mycotoxins:	C5838 LCMSMS/AOAC 2007.01	MDH Exhibit 6		PASS
Heavy Metals:	ICPMS (External Partner)	MDH Exhibit 4		PASS

Product of Vermont USA



Test Method: C5210 HPLC-UV (Internal)

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Terpene Profile	Parts Per Million	Parts Per Million	Cannabinoid Potency	MG Per Unit	MG Per Serving	
a-Pinene	<2	Isoborneol	<2	CBD	534	17.79
Camphene	<2	Menthol	<2	CBDA	<14.03	<0.47
Sabinene-	<2	endo-Borneol	<2	d9-THC	20	0.65
b-Pinene	<2	a-Terpeneol	3	THCA-A	<14.03	<0.47
b-Myrcene	<2	g Terpeneol	<2	d8-THC	<1.4	<0.05
a-Phellandrene	<2	Nerol	<2	CBG	30.6	1.02
Carene	<2	Pulegone	<2	CBGA	<1.4	<0.05
a-Terpinene	<2	Geraniol	<2	CBN	<1.4	<0.05
D-Limonene	<2	Geranyl acetate	<2	CBNA	<1.4	<0.05
o-Cymene	<2	a-Cedrene	<2	CBC	38.2	1.27
Eucalyptol	<2	(E)-b-Famesene	<2	CBCA	<1.4	<0.05
b-Ocimene	<2	Caryophyllene	38	CBDV	15.2	0.51
gTerpinene	<2	a-Humulene	10	CBDVA	<1.4	<0.05
Terpinolene	<2	trans-Neradiol	<2	THCV	5.98	0.20
Sabinene Hydrate	<2	cis-Neradiol	<2	THCVA	<1.4	<0.05
Fenchone	<2	Valencene	<2	CBL	<1.4	<0.05
Linalool	5	Guaiol	<2			
Fenchol	4	Caryophyllene Oxide	<2			
Isopulegol	<2	Cedrol	<2			
Camphor	<2	a-Bisabolol	5			

Recommended Storage: 20-25 ° C (68-77° F), Refrigerate for long term storage (> 3 months); avoid exposure to prolonged heat and light.

Retest Date: 1-Mar-22

Product Information: Hemp derived whole plant tinctures are intended for oral ingestion; recommended serving size is 0.5 - 1.0 mL.

Approved By:



Representative: Keith Griswold, MS

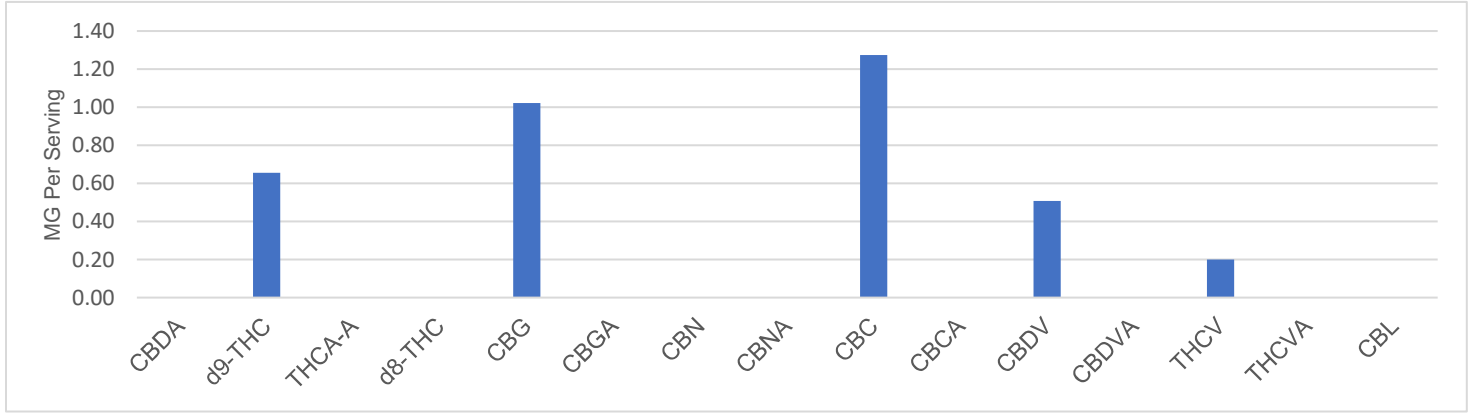
Title: Chief Scientific Officer

Date: 7-Apr-20

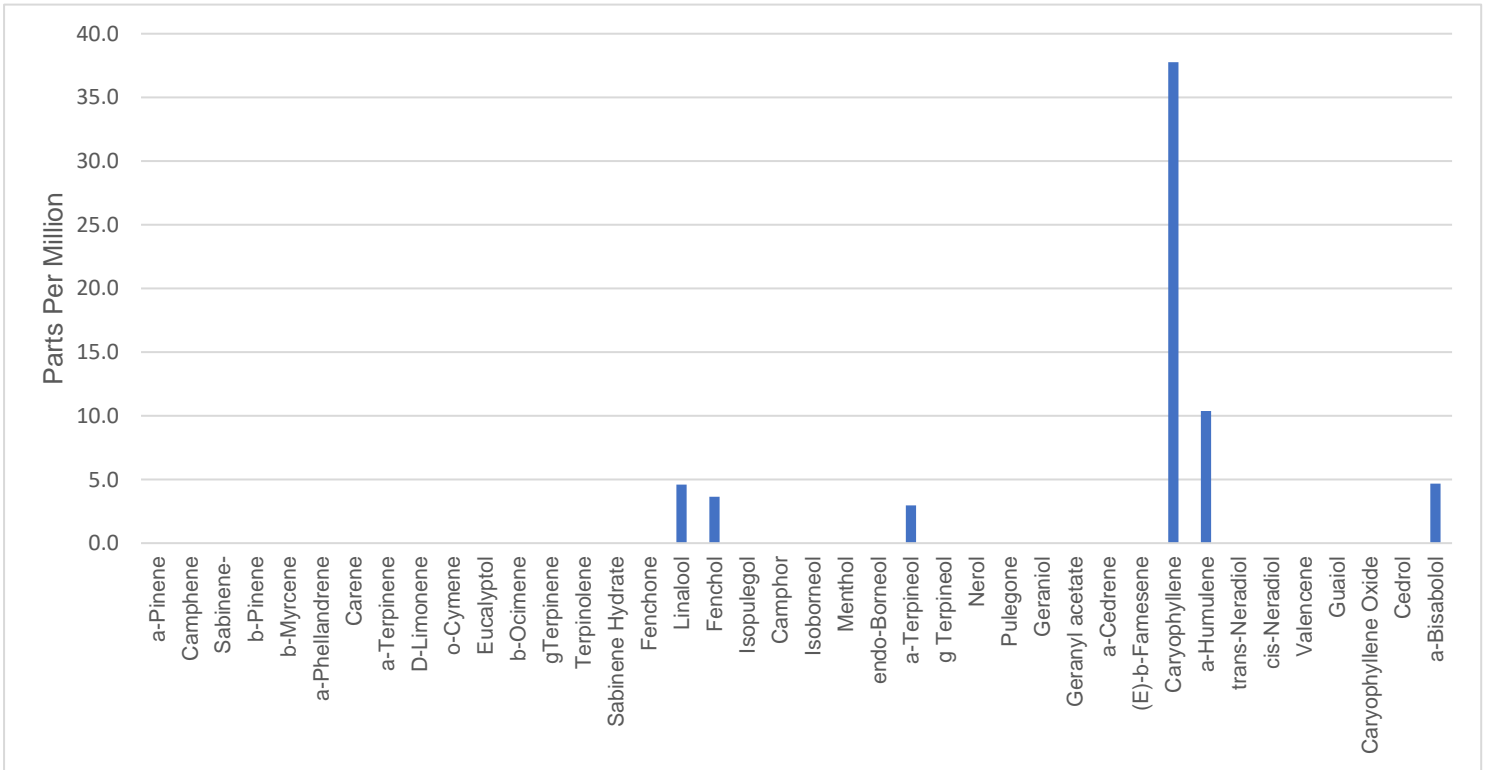


Data reported in this document pertains only to this batch and as sampled according to QMT.PLN.01.03. All rights are reserved to the producer and distributor of this product. Unauthorized reproduction of this data is prohibited. All testing is performed with internally developed test methods that have been verified or validated in accordance to AOAC and ICH guidelines. Test method performance is monitored through control charting.

Batch ID: 1922019002 **Parameter:** Cannabinoid Potency
DOM: 30-Mar-20 **Test Method:** C6198 LCMSMS (Internal); LOQ = 0.005%



Batch ID: 1922019002 **Parameter:** Terpene Profile
DOM: 30-Mar-20 **Test Method:** C5933 GCMS (Internal); Static Headspace; LOQ = 2 ppm



*Terpenes represented of hemp derived before any flavouring is added.

Approved By:



Representative: Keith Griswold, MS

Title: Chief Scientific Officer

Date: 7-Apr-20



Certificate of Analysis

Product Specifications

Batch ID: 1922019002 **Parameter:** Residual Solvents
DOM: 30-Mar-20 **Test Method:** C5923 GCMS (Internal); Static Headspace

Analyte	Units	Reporting Limit	Action Limit	Result	Status
Methanol	%w/w	0.05	0.30	< 0.05	PASS
Pentane	%w/w	0.003	0.50	< 0.003	PASS
Ethanol	%w/w	0.05	0.50	<0.05	PASS
Acetone	%w/w	0.05	0.50	< 0.05	PASS
Isopropanol	%w/w	0.05	0.50	<0.05	PASS
Acetonitrile	%w/w	0.003	0.04	<0.003	PASS
n-Hexane	%w/w	0.003	0.03	<0.003	PASS
Tetrahydrofuran	%w/w	0.003	0.07	<0.003	PASS
Chloroform	%w/w	0.003	0.01	<0.003	PASS
n-Heptane	%w/w	0.02	0.50	<0.02	PASS
Toluene	%w/w	0.003	0.09	<0.003	PASS
m & p Xylene	%w/w	0.003	0.22	<0.003	PASS

*Action limit based on USP 467 requirements for residual solvents Class I, II and III.

Batch ID: 1922019002 **Parameter:** Mycotoxins
DOM: 30-Mar-20 **Test Method:** C5838 LCMSMS/AOAC 2007.01

Analytes	Units	Reporting Limit	Action Limit	Results	Status
Mycotoxins	ppb	n/a	20	< 20	PASS

Batch ID: 1922019002 **Parameter:** Pesticides
DOM: 30-Mar-20 **Test Method:** C5838 LCMSMS/AOAC 2007.01

Analyte	Units	Reporting Limit	Action Limit	Results	Status
Bifenazate	ppm	0.10	0.20	<0.10	PASS
Etoxale	ppm	0.05	0.20	< 0.05	PASS
Imazalil	ppm	0.05	0.20	<0.05	PASS
Imidacloprid	ppm	0.05	0.40	<0.05	PASS
Myclobutanil	ppm	0.05	0.20	<0.05	PASS
Spiromesifen	ppm	0.05	0.20	<0.05	PASS
Trifloxystrobin	ppm	0.05	0.20	<0.05	PASS

Reporting limit for all mycotoxins screened is 2 parts per billion (ppb); Action level, maximum level allowed by EPA/Orgeon Regulations

Batch ID: 1922019002 **Parameter:** Heavy Metals
DOM: 30-Mar-20 **Test Method:** PMS (External Partner)

Analyte	Units	Reporting Limit	Action Limit	Results*	Status
As	ppb	0.1	200	31	PASS
Hg	ppb	0.1	100	< 0.1	PASS
Cd	ppb	0.1	200	48.5	PASS
Pb	ppb	0.1	500	73	PASS

*Derived from whole flower prior to extraction and formulation

Approved By:



Representative: Keith Griswold, MS

Title: Chief Scientific Officer

Date: 7-Apr-20

