

SAMPLE NAME: Full Spectrum Distillate

Concentrate, Product Inhalable

CULTIVATOR / MANUFACTURER

Business Name:

License Number:

Address:

DISTRIBUTOR

Business Name: Bardo

License Number:

Address:

SAMPLE DETAIL

Batch Number: B6

Sample ID: 200922S001

Date Collected: 09/22/2020

Date Received: 09/22/2020

Batch Size:

Sample Size: 1.0 Unit(s)

Unit Mass: 10 Grams per Unit

Serving Size:



Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: **3.8%**

Total CBD: **78.104%**

Sum of Cannabinoids: **86.374%**

Total Cannabinoids: **86.420%**

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: NT

Viscosity: NT

SAFETY ANALYSIS - SUMMARY

$\Delta 9\text{THC}$ per Unit: **PASS**

Foreign Material: NT

Water Activity: NT

Vitamin E Acetate: NT

Pesticides: **PASS**

Mycotoxins: NT

Residual Solvents: **PASS**

Heavy Metals: **PASS**

Microbial Impurities (PCR): **PASS**

Microbial Impurities (Plating): 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: *Carmen Stackhouse* Approved by: *Josh Wurzer*, President
Date: 09/26/2020 Date: 09/26/2020

Cannabinoid Analysis

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

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

TOTAL THC: 3.8%

Total THC ($\Delta 9\text{THC} + 0.877 \cdot \text{THCa}$)

TOTAL CBD: 78.104%

Total CBD ($\text{CBD} + 0.877 \cdot \text{CBDa}$)

TOTAL CANNABINOIDS: 86.420%

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

TOTAL CBG: 1.134%

Total CBG ($\text{CBG} + 0.877 \cdot \text{CBGa}$)

TOTAL THCV: ND

Total THCV ($\text{THCV} + 0.877 \cdot \text{THCVa}$)

TOTAL CBC: 2.88%

Total CBC ($\text{CBC} + 0.877 \cdot \text{CBCa}$)

TOTAL CBDV: 0.382%

Total CBDV ($\text{CBDV} + 0.877 \cdot \text{CBDVa}$)

CANNABINOID TEST RESULTS - 09/24/2020

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBD	0.07 / 0.20	± 36.162	781.04	78.104
$\Delta 9\text{THC}$	0.06 / 0.18	± 1.291	37.54	3.754
CBC	0.2 / 0.5	± 0.85	28.8	2.88
CBG	0.06 / 0.19	± 0.447	11.34	1.134
CBDV	0.04 / 0.14	± 0.167	3.82	0.382
CBN	0.1 / 0.3	± 0.08	1.2	0.12
$\Delta 8\text{THC}$	0.1 / 0.4	N/A	ND	ND
THCa	0.05 / 0.14	N/A	ND	ND
THCV	0.1 / 0.2	N/A	ND	ND
THCVa	0.07 / 0.20	N/A	ND	ND
CBDa	0.02 / 0.07	N/A	ND	ND
CBDVa	0.03 / 0.10	N/A	ND	ND
CBGa	0.1 / 0.2	N/A	ND	ND
CBL	0.06 / 0.18	N/A	ND	ND
CBCa	0.07 / 0.21	N/A	ND	ND
SUM OF CANNABINOIDS			863.74 mg/g	86.374%

Unit Mass: 10 Grams per Unit

$\Delta 9\text{THC}$ per Unit	1100 per-package limit	375.40 mg/unit	PASS
Total THC per Unit		380 mg/unit	
CBD per Unit		7810.40 mg/unit	
Total CBD per Unit		7810.40 mg/unit	
Sum of Cannabinoids per Unit		8637.40 mg/unit	
Total Cannabinoids per Unit		8642.00 mg/unit	

MOISTURE TEST RESULT

Not Tested

DENSITY TEST RESULT

Not Tested

VISCOSITY TEST RESULT

Not Tested





Pesticide Analysis

CATEGORY 1 PESTICIDE TEST RESULTS - 09/26/2020 ✔ PASS

CATEGORY 1 AND 2 PESTICIDES

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
Aldicarb				NT	
Carbofuran				NT	
Chlordane*				NT	
Chlorfenapyr*				NT	
Chlorpyrifos	0.02 / 0.06	≥ LOD	N/A	ND	PASS
Coumaphos				NT	
Daminozide				NT	
DDVP (Dichlorvos)				NT	
Dimethoate				NT	
Ethoprop(hos)				NT	
Etofenprox				NT	
Fenoxycarb				NT	
Fipronil				NT	
Imazalil				NT	
Methiocarb				NT	
Methyl parathion				NT	
Mevinphos				NT	
Paclobutrazol				NT	
Propoxur				NT	
Spiroxamine				NT	
Thiacloprid				NT	

CATEGORY 2 PESTICIDE TEST RESULTS - 09/26/2020 ✔ PASS

Abamectin	0.03 / 0.10	0.1	N/A	ND	PASS
Acephate				NT	
Acequinocyl				NT	
Acetamiprid				NT	
Azoxystrobin	0.01 / 0.04	0.1	N/A	ND	PASS
Bifenazate	0.01 / 0.02	0.1	N/A	ND	PASS
Bifenthrin	0.01 / 0.02	3	N/A	ND	PASS
Boscalid	0.02 / 0.06	0.1	N/A	ND	PASS
Captan				NT	
Carbaryl				NT	
Chlorantraniliprole				NT	

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Pesticide Analysis *Continued*

CATEGORY 1 AND 2 PESTICIDES

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

CATEGORY 2 PESTICIDE TEST RESULTS - 09/26/2020 *continued* ✓ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Clofentezine				NT	
Cyfluthrin				NT	
Cypermethrin	0.1 / 0.3	1	N/A	ND	PASS
Diazinon				NT	
Dimethomorph				NT	
Etozazole	0.010 / 0.028	0.1	N/A	ND	PASS
Fenhexamid				NT	
Fenpyroximate				NT	
Flonicamid				NT	
Fludioxonil				NT	
Hexythiazox	0.01 / 0.04	0.1	N/A	ND	PASS
Imidacloprid	0.01 / 0.04	5	N/A	ND	PASS
Kresoxim-methyl				NT	
Malathion	0.02 / 0.05	0.5	N/A	ND	PASS
Metalaxyl				NT	
Methomyl				NT	
Myclobutanil	0.03 / 0.1	0.1	N/A	ND	PASS
Naled				NT	
Oxamyl				NT	
Pentachloronitrobenzene*				NT	
Permethrin	0.03 / 0.09	0.5	N/A	ND	PASS
Phosmet				NT	
Piperonylbutoxide	0.003 / 0.009	3	N/A	ND	PASS
Prallethrin				NT	
Propiconazole	0.01 / 0.03	0.1	N/A	ND	PASS
Pyrethrins				NT	
Pyridaben				NT	
Spinetoram				NT	
Spinosad				NT	
Spiromesifen	0.02 / 0.05	0.1	N/A	ND	PASS
Spirotetramat				NT	
Tebuconazole	0.02 / 0.07	0.1	N/A	ND	PASS
Thiamethoxam				NT	
Trifloxystrobin	0.01 / 0.03	0.1	N/A	ND	PASS





Residual Solvents Analysis

CATEGORY 1 AND 2 RESIDUAL SOLVENTS

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

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

CATEGORY 1 RESIDUAL SOLVENTS TEST RESULTS - 09/24/2020 ✓ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
1,2-Dichloroethane	0.05 / 0.1	1	N/A	ND	PASS
Benzene	0.03 / 0.09	1	N/A	ND	PASS
Chloroform	0.1 / 0.2	1	N/A	ND	PASS
Ethylene Oxide	0.1 / 0.4	1	N/A	<LOQ	PASS
Methylene chloride	0.3 / 0.9	1	N/A	ND	PASS
Trichloroethylene	0.1 / 0.3	1	N/A	ND	PASS

CATEGORY 2 RESIDUAL SOLVENTS TEST RESULTS - 09/24/2020 ✓ PASS

Acetone	20 / 50	5000	N/A	ND	PASS
Acetonitrile	2 / 7	410	N/A	ND	PASS
Butane	10 / 50	5000	N/A	ND	PASS
Ethanol	20 / 50	5000	±2.0	66	PASS
Ethyl acetate	20 / 60	5000	N/A	ND	PASS
Ethyl ether	20 / 50	5000	N/A	ND	PASS
Heptane	20 / 60	5000	N/A	ND	PASS
Hexane	2 / 5	290	N/A	ND	PASS
Isopropyl Alcohol	10 / 40	5000	N/A	ND	PASS
Methanol	50 / 200	3000	N/A	ND	PASS
Pentane	20 / 50	5000	N/A	ND	PASS
Propane	10 / 20	5000	N/A	ND	PASS
Toluene	7 / 21	890	N/A	ND	PASS
Total Xylenes	50 / 160	2170	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 - 09/23/2020 ✓ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Cadmium	0.02 / 0.05	0.2	N/A	ND	PASS
Lead	0.04 / 0.1	0.5	N/A	ND	PASS
Arsenic	0.02 / 0.1	0.2	N/A	ND	PASS
Mercury	0.002 / 0.01	0.1	N/A	ND	PASS





Microbial Impurities Analysis

PCR AND PLATING

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbial impurities.

Method: QSP - (1221) Analysis of Microbial Impurities

MICROBIAL IMPURITIES TEST RESULTS (PCR) - 09/24/2020 ✓ PASS

COMPOUND	ACTION LIMIT	RESULT	RESULT
Shiga toxin-producing <i>Escherichia coli</i>	Detect	ND	PASS
<i>Salmonella</i> spp.	Detect	ND	PASS
<i>Aspergillus fumigatus</i>		NT	
<i>Aspergillus flavus</i>		NT	
<i>Aspergillus niger</i>		NT	
<i>Aspergillus terreus</i>		NT	

Analysis conducted by 3M™ Petrifilm™ and plate counts of microbial impurities.

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

MICROBIAL IMPURITIES TEST RESULTS (PLATING)

COMPOUND	RESULT (cfu/g)
Aerobic Plate Count	NT
Total Yeast and Mold	NT

