



DEA No. RA0571996
FL License # CMTL-0003
CLIA No. 10D1094068

Certificate of Analysis

Compliance Test

ALTOPA, INC.
303 DUNWOODY DRIVE, RALEIGH,
NC 27615
RALEIGH, NC 27615

Batch # B1D07722
Batch Date: 2022-03-23
Extracted From: Hemp

Sampling Method: MSP 7.3.1
Test Reg State: Florida

Production Facility: Precision Plant
Molecules

Order # ALT220323-010001
Order Date: 2022-03-23
Sample # AACP943

Sampling Date: 2022-04-22
Lab Batch Date: 2022-04-22
Completion Date: 2022-04-28

Initial Gross Weight: 24.068 g



Product Image

Potency Tested
Heavy Metals Passed
Mycotoxins Passed
Pesticides Passed
Residual Solvents Passed
Listeria Monocytogenes Passed
Pathogenic Passed

Delta 8/Delta 10 Potency 12

Tested
(LCUV)

Potency Summary

Specimen Weight: 56.160 mg

Analyte	LOD (%)	LOQ (%)	Result (mg/g)	(%)
Delta-8 THC	0.000026	0.001	839.540	83.954
CBC	0.000018	0.001	<LOQ	<LOQ
CBD	0.000054	0.001	<LOQ	<LOQ
THCA-A	0.000032	0.001	<LOQ	<LOQ
Delta-9 THC	0.000013	0.001	<LOQ	<LOQ
Delta-10 THC	0.000003	0.001	<LOQ	<LOQ
CBN	0.000014	0.001	<LOQ	<LOQ
CBGA	0.00008	0.001	<LOQ	<LOQ
CBG	0.000248	0.001	<LOQ	<LOQ
CBDV	0.000065	0.001	<LOQ	<LOQ
CBDA	0.00001	0.001	<LOQ	<LOQ
THCV	0.000007	0.001	<LOQ	<LOQ

Total Delta 8 83.954%	-	Total Delta 10 None Detected
Total THC None Detected	-	Total CBD None Detected
Total CBG None Detected	-	Total CBN None Detected
Other Cannabinoids None Detected	-	Total Cannabinoids 83.954%

Xueli Gao
Xueli Gao
Lab Toxicologist
Ph.D., DABT

Aixia Sun
Aixia Sun
Lab Director/Principal Scientist
D.H.Sc., M.Sc., B.Sc., MT (AAB)



Definitions and Abbreviations used in this report: *Total CBD = CBD + (CBD-A * 0.877), *Total CBDV = CBDV + (CBDVA * 0.87), *Total THC = THCA-A * 0.877 + Delta 9 THC, *Total THCV = THCV + (THCVA * 0.87), *CBG Total = (CBGA * 0.877) + CBG, *CBN Total = (CBNA * 0.877) + CBN, *Total CBC = CBC + (CBCA * 0.877), *Total THC-O-Acetate = Delta 8 THC-O-Acetate + Delta 9 THC-O-Acetate, *Other Cannabinoids Total = Total Cannabinoids - All the listed cannabinoids on the summary section, *Total Detected Cannabinoids = Delta8a10a-THC + Delta8-THC + Total CBN + CBT + Delta8-THCV + Total CBG + Total CBD + Total THCV + CBL + Total THC + Total CBC + Total CBDV + Delta10-THC + Total THC-O-Acetate, *Analyte Details above show the Dry Weight Concentrations unless specified as 12% moisture concentration. (mg/ml) = Milligrams per Milliliter, LOQ = Limit of Quantitation, LOD = Limit of Detection, Dilution = Dilution Factor (ppb) = Parts per Billion, (%) = Percent, (cfu/g) = Colony Forming Unit per Gram (cfu/g) = Colony Forming Unit per Gram, LOD = Limit of Detection, (µg/g) = Microgram per Gram (ppm) = Parts per Million, (ppm) = (µg/g), (aw) = aw (area ratio) = Area Ratio, (mg/Kg) = Milligram per Kilogram, *Measurement of Uncertainty = +/- 10%

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Pesticides FL V4

Specimen Weight: 268.400 mg

Dilution Factor: 5.589

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Abamectin	28.23	300	<LOQ	Fludioxonil	48	3000	<LOQ
Acephate	30	3000	<LOQ	Hexythiazox	30	2000	<LOQ
Acequinocyl	48	2000	<LOQ	Imazalil	30	100	<LOQ
Acetamiprid	30	3000	<LOQ	Imidacloprid	30	3000	<LOQ
Aldicarb	30	100	<LOQ	Kresoxim Methyl	30	1000	<LOQ
Azoxystrobin	10	3000	<LOQ	Malathion	30	2000	<LOQ
Bifenazate	30	3000	<LOQ	Metalaxyl	10	3000	<LOQ
Bifenthrin	30	500	<LOQ	Methiocarb	30	100	<LOQ
Boscalid	10	3000	<LOQ	Methomyl	30	100	<LOQ
Captan	30	3000	<LOQ	methyl-Parathion	10	100	<LOQ
Carbaryl	10	500	<LOQ	Mevinphos	10	100	<LOQ
Carbofuran	10	100	<LOQ	Myclobutanil	30	3000	<LOQ
Chlorantraniliprole	10	3000	<LOQ	Naled	30	500	<LOQ
Chlordane	10	100	<LOQ	Oxamyl	30	500	<LOQ
Chlorfenapyr	30	100	<LOQ	Pacllobutrazol	30	100	<LOQ
Chloromequat Chloride	10	3000	<LOQ	Pentachloronitrobenzene	10	200	<LOQ
Chlorpyrifos	30	100	<LOQ	Permethrin	30	1000	<LOQ
Clofentezine	30	500	<LOQ	Phosmet	30	200	<LOQ
Coumaphos	48	100	<LOQ	Piperonylbutoxide	30	3000	<LOQ
Cyfluthrin	30	1000	<LOQ	Prallethrin	30	400	<LOQ
Cypermethrin	30	1000	<LOQ	Propiconazole	30	1000	<LOQ
Daminozide	30	100	<LOQ	Propoxur	30	100	<LOQ
Diazinon	30	200	<LOQ	Pyrethrins	30	1000	<LOQ
Dichlorvos	30	100	<LOQ	Pyridaben	30	3000	<LOQ
Dimethoate	30	100	<LOQ	Spinetoram	10	3000	<LOQ
Dimethomorph	48	3000	<LOQ	Spinosad	30	3000	<LOQ
Ethoprophos	30	100	<LOQ	Spiromesifen	30	3000	<LOQ
Etofenprox	30	100	<LOQ	Spirotetramat	30	3000	<LOQ
Etoxazole	30	1500	<LOQ	Spiroxamine	30	100	<LOQ
Fenhexamid	10	3000	<LOQ	Tebuconazole	30	1000	<LOQ
Fenoxycarb	30	100	<LOQ	Thiacloprid	30	100	<LOQ
Fenpyroximate	30	2000	<LOQ	Thiamethoxam	30	1000	<LOQ
Fipronil	30	100	<LOQ	Trifloxystrobin	30	3000	<LOQ
Fonicamid	30	2000	<LOQ				

Passed
(LCMS/GCMS)



Residual Solvents - FL (CBD)

Specimen Weight: 161.900 mg

Dilution Factor: 500.000

Analyte	LOQ (ppm)	Action Level (ppm)	Result (ppm)	Analyte	LOQ (ppm)	Action Level (ppm)	Result (ppm)
1,1-Dichloroethene	0.16	8	<LOQ	Heptane	1.39	5000	<LOQ
1,2-Dichloroethane	0.04	5	<LOQ	Hexane	1.17	290	<LOQ
Acetone	2.08	5000	<LOQ	Isopropyl alcohol	1.39	500	<LOQ
Acetonitrile	1.17	410	<LOQ	Methanol	0.69	3000	<LOQ
Benzene	0.02	2	<LOQ	Methylene chloride	2.43	600	<LOQ
Butanes	2.5	2000	<LOQ	Pentane	2.08	5000	<LOQ
Chloroform	0.04	60	Passed	Propane	5.83	2100	<LOQ
Ethanol	2.78	5000	<LOQ	Toluene	2.92	890	<LOQ
Ethyl Acetate	1.11	5000	<LOQ	Total Xylenes	2.92	2170	<LOQ
Ethyl Ether	1.39	5000	<LOQ	Trichloroethylene	0.49	80	<LOQ
Ethylene Oxide	0.1	5	<LOQ				

Passed
(GCMS)



Mycotoxins

Specimen Weight: 268.400 mg

Dilution Factor: 5.589

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Aflatoxin B1	6	20	<LOQ	Aflatoxin G2	6	20	<LOQ
Aflatoxin B2	6	20	<LOQ	Ochratoxin A	12	20	<LOQ
Aflatoxin G1	6	20	<LOQ				

Passed
(LCMS)



Heavy Metals

Specimen Weight: 246.350 mg

Dilution Factor: 202

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Arsenic (As)	100	1500	<LOQ	Lead (Pb)	100	500	<LOQ
Cadmium (Cd)	100	500	<LOQ	Mercury (Hg)	100	3000	<LOQ

Passed
(ICP-MS)

Xueli Gao Lab Toxicologist
Ph.D., DABT

Aixia Sun Lab Director/Principal Scientist
D.H.Sc., M.Sc., B.Sc., MT (AAB)



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Δ8
Sample Matrix:
CBD/HEMP
Derivative Products
(Ingestion)



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Pathogenic SAE (qPCR)

Specimen Weight: 236.580 mg

Passed
(qPCR)

Dilution Factor: 1.000

Analyte	Action Level (cfu/g)	Result (cfu/g)	Analyte	Action Level (cfu/g)	Result (cfu/g)
Aspergillus (Flavus, Fumigatus, Niger, Terreus)	1	Absence in 1g	Salmonella	1	Absence in 1g
E.Coli	1	Absence in 1g			



Listeria Monocytogenes

Specimen Weight: 1011.020 mg

Passed
(qPCR)

Dilution Factor: 1.000

Analyte	Action Level (cfu/g)	Result
Listeria Monocytogenes	1	Absence in 1g

Xueli Gao
Xueli Gao Lab Toxicologist
Ph.D., DABT

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