



HE 12,000mg cream
Sample Matrix:
CBD/HEMP
Derivative Products
(External Use)



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

Certificate of Analysis

Compliance Test

HEMP-EMU
295 GOOLSBY BLVD
DEERFIELD BEACH, FL 33442

Batch # SO-1366/4
Batch Date: 2022-08-01
Extracted From: hemp

Sampling Method: MSP 7.3.1
Test Reg State: Florida

Production Facility: Emerald corp
Production Date: 2022-08-01

Order # HEM220823-010001
Order Date: 2022-08-23
Sample # AADH483

Sampling Date: 2022-08-26
Lab Batch Date: 2022-08-26
Completion Date: 2022-09-01

Initial Gross Weight: 166.500 g
Net Weight: 121.507 g

Number of Units: 1
Net Weight per Unit: 121507.000 mg



Product Image

Potency Tested **Heavy Metals Passed** **Mycotoxins Passed** **Pesticides Passed** **Residual Solvents Passed**

Pathogenic Microbiology Passed **Listeria Monocytogenes Passed**

Potency 10

Specimen Weight: 105.070 mg

Tested
SOP13.001 (LCUV)

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
CBD	100.000	5.40E-5	0.0015	112.1000	11.2100
CBDV	10.000	6.50E-5	0.0015	0.4660	0.0466
Delta-9 THC	10.000	1.30E-5	0.0015	0.2280	0.0228
CBC	10.000	1.80E-5	0.0015	<LOQ	<LOQ
CBDA	10.000	1.00E-5	0.0015	<LOQ	<LOQ
CBG	10.000	2.48E-4	0.0015	<LOQ	<LOQ
CBGA	10.000	8.00E-5	0.0015	<LOQ	<LOQ
CBN	10.000	1.40E-5	0.0015	<LOQ	<LOQ
THCA	10.000	3.20E-5	0.0015	<LOQ	<LOQ
THCV	10.000	7.00E-6	0.0015	<LOQ	<LOQ

Potency Summary

Total Active THC 0.023% 27.670mg	Total Active CBD 11.210% 13,620.930mg
Total CBG None Detected	Total CBN None Detected
Other Cannabinoids 0.047% 57.110mg	Total Cannabinoids 11.279% 13,704.770mg

Mycotoxins

Specimen Weight: 264.300 mg

Passed
SOP13.007 (LCMS)

Dilution Factor: 5.680

Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Aflatoxin B1	3.0400E-1	6	20	<LOQ
Aflatoxin B2	7.7000E-2	6	20	<LOQ
Aflatoxin G1	3.0400E-1	6	20	<LOQ

Pathogenic Microbiology SAE (MicroArray)

Passed
SOP13.019 (Micro Array)

Specimen Weight: 1039.600 mg

Dilution Factor: 1.000

Analyte	Result (cfu/g)	Analyte	Result (cfu/g)
Aspergillus flavus	Absence in 1g	Aspergillus terreus	Absence in 1g
Aspergillus fumigatus	Absence in 1g	Salmonella	Absence in 1g
Aspergillus niger	Absence in 1g	STEC E. Coli	Absence in 1g

Xueli Gao
Lab Toxicologist
Ph.D., DABT

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



Definitions and Abbreviations used in this report: Total Active CBD = CBD + (CBD-A * 0.877), *Total CBDV = CBDV + (CBDVA * 0.87), Total Active THC = THCA-A * 0.877 + Delta 9 THC, Total THC = THC + (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 THC + 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: 264.300 mg

Passed
SOP13.007
(LCMS/GCMS)



Listeria Monocytogenes
Specimen Weight: 989.130 mg

Passed
SOP13.032
(qPCR)

Dilution Factor: 5.680

Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Abamectin	2.8800E-1	28.23	300	<LOQ	Fludioxonil	1.7400E+0	48	3000	<LOQ
Acephate	2.3000E-2	30	3000	<LOQ	Hexythiazox	4.9000E-2	30	2000	<LOQ
Acequinocyl	9.5640E+0	48	2000	<LOQ	Imazalil	2.4800E-1	30	100	<LOQ
Acetamiprid	5.2000E-2	30	3000	<LOQ	Imidacloprid	9.4000E-2	30	3000	<LOQ
Aldicarb	2.6000E-2	30	100	<LOQ	Kresoxim Methyl	4.2000E-2	30	1000	<LOQ
Azoxystrobin	8.1000E-2	10	3000	<LOQ	Malathion	8.2000E-2	30	2000	<LOQ
Bifenazate	1.4150E+0	30	3000	<LOQ	Metaxalyl	8.1000E-2	10	3000	<LOQ
Bifenthrin	4.3000E-2	30	500	<LOQ	Methiocarb	3.2000E-2	30	100	<LOQ
Boscalid	5.5000E-2	10	3000	<LOQ	Methomyl	2.2000E-2	30	100	<LOQ
Captan	6.1200E+0	30	3000	<LOQ	methyl-Parathion	1.7100E+0	10	100	<LOQ
Carbaryl	2.2000E-2	10	500	<LOQ	Mevinphos	2.1500E+0	10	100	<LOQ
Carbofuran	3.4000E-2	10	100	<LOQ	Myclobutanil	1.0290E+0	30	3000	<LOQ
Chlorantraniliprole	3.3000E-2	10	3000	<LOQ	Naled	9.5000E-2	30	500	<LOQ
Chlordane	1.0000E+1	10	100	<LOQ	Oxamyl	2.5000E-2	30	500	<LOQ
Chlorfenapyr	3.4000E-2	30	100	<LOQ	Paclitubutrazol	6.5000E-2	30	100	<LOQ
Chlomequat Chloride	1.0800E-1	10	3000	<LOQ	Pentachloronitrobenzene	1.3200E+0	10	200	<LOQ
Chlorpyrifos	3.5000E-2	30	100	<LOQ	Permethrin	3.4300E-1	30	1000	<LOQ
Clofentezine	1.1900E-1	30	500	<LOQ	Phosmet	8.2000E-2	30	200	<LOQ
Coumaphos	3.7700E+0	48	100	<LOQ	Piperonylbutoxide	2.9000E-2	30	3000	<LOQ
Cyfluthrin	3.1100E+0	30	1000	<LOQ	Prallethrin	7.9800E-1	30	400	<LOQ
Cypermethrin	1.4490E+0	30	1000	<LOQ	Propiconazole	7.0000E-2	30	1000	<LOQ
Daminozide	8.8500E-1	30	100	<LOQ	Propoxur	4.6000E-2	30	100	<LOQ
Diazinon	4.4000E-2	30	200	<LOQ	Pyrethrins	2.3593E+1	30	1000	<LOQ
Dichlorvos	2.1820E+0	30	100	<LOQ	Pyridaben	3.2000E-2	30	3000	<LOQ
Dimethoate	2.1000E-2	30	100	<LOQ	Spinetoram	8.0000E-2	10	3000	<LOQ
Dimethomorph	5.8300E+0	48	3000	<LOQ	Spinosad	8.8000E-2	30	3000	<LOQ
Ethoprophos	3.6000E-1	30	100	<LOQ	Spiromesifen	2.6100E-1	30	3000	<LOQ
Etofenprox	1.1600E-1	30	100	<LOQ	Spirotetramat	8.9000E-2	30	3000	<LOQ
Etoxazole	9.5000E-2	30	1500	<LOQ	Spiroxamine	1.3100E-1	30	100	<LOQ
Fenhexamid	5.1000E-1	10	3000	<LOQ	Tebuconazole	6.7000E-2	30	1000	<LOQ
Fenoxycarb	1.0700E-1	30	100	<LOQ	Thiacloprid	6.4000E-2	30	100	<LOQ
Fenpyroximate	1.3800E-1	30	2000	<LOQ	Thiamethoxam	5.0000E-2	30	1000	<LOQ
Fipronil	1.0700E-1	30	100	<LOQ	Trifloxystrobin	3.7000E-2	30	3000	<LOQ
Fonicamid	5.1700E-1	30	2000	<LOQ					

Dilution Factor: 1.000

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

Xueli Gao
Xueli Gao Lab Toxicologist
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Aixia Sun
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Initial Gross Weight: 166.500 g
Net Weight: 121.507 g

Number of Units: 1
Net Weight per Unit: 121507.000 mg

Residual Solvents - FL (CBD)

Specimen Weight: 316.000 mg

Passed
SOP13.039 (GCMS)

Dilution Factor: 5000.000

Analyte	LOD (ppm)	LOQ (ppm)	Action Level (ppm)	Result (ppm)	Analyte	LOD (ppm)	LOQ (ppm)	Action Level (ppm)	Result (ppm)
1,1-Dichloroethene	0.0094	0.16	8	<LOQ	Heptane	0.0013	1.39	5000	<LOQ
1,2-Dichloroethane	0.0003	0.04	5	<LOQ	Hexane	0.068	1.17	290	<LOQ
Acetone	0.015	2.08	5000	<LOQ	Isopropyl alcohol	0.0048	1.39	500	<LOQ
Acetonitrile	0.06	1.17	410	<LOQ	Methanol	0.0005	0.69	3000	<LOQ
Benzene	0.0002	0.02	2	<LOQ	Methylene chloride	0.0029	2.43	600	<LOQ
Butanes	0.4167	2.5	2000	<LOQ	Pentane	0.037	2.08	5000	<LOQ
Chloroform	0.0001	0.04	60	<LOQ	Propane	0.031	5.83	2100	<LOQ
Ethanol	0.0021	2.78	5000	<LOQ	Toluene	0.0009	2.92	890	<LOQ
Ethyl Acetate	0.0012	1.11	5000	<LOQ	Total Xylenes	0.0001	2.92	2170	<LOQ
Ethyl Ether	0.0049	1.39	5000	<LOQ	Trichloroethylene	0.0014	0.49	80	<LOQ
Ethylene Oxide	0.0038	0.1	5	<LOQ					

Heavy Metals

Specimen Weight: 247.770 mg

Passed
SOP13.048 (ICP-MS)

Dilution Factor: 201

Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Arsenic (As)	4.83	100	1500	<LOQ	Lead (Pb)	11.76	100	500	<LOQ
Cadmium (Cd)	.64	100	500	<LOQ	Mercury (Hg)	.58	100	3000	<LOQ

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