



License No. 800025015
FL License # CMTL-0003
CLIA No. 10D1094068

Certificate of Analysis

R&D

CAROLINA HEMP REFINERY Batch # CHR-cart-d8-010 Test Reg State: Florida Production Facility: Carolina Hemp Refinery
800 UNION RIDGE ROAD Batch Date: 2021-03-04 Production Date: 2021-03-01
BURLINGTON, NC 27217 Extracted From: Hemp

Order # CAR210304-020013 Sampling Date: 2021-03-08 Initial Gross Weight: 94.328 g
Order Date: 2021-03-04 Lab Batch Date: 2021-03-08
Sample # AAB338 Completion Date: 2021-03-16



Product Image

- Potency Tested
- Heavy Metals Passed
- 2,3-Butanedione Passed
- Mycotoxins Passed
- Pesticides Passed
- Residual Solvents Passed
- Listeria Monocytogenes Passed
- Pathogenic Passed
- Vitamin E Passed

Delta 8/Delta 10 Potency

12

Tested (LCUV)

Potency Summary

Specimen Weight: 48.680 mg

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
Delta-8 THC	10.000	0.000026	0.001	865.400	86.540
CBN	10.000	0.000014	0.001	0.305	0.031
Delta-10 THC	10.000	0.000003	0.001		<LOQ
Delta-9 THC	10.000	0.000013	0.001		<LOQ
CBC	10.000	0.000018	0.001		<LOQ
CBD	10.000	0.000054	0.001		<LOQ
THCV	10.000	0.000007	0.001		<LOQ
THCA-A	10.000	0.000032	0.001		<LOQ
CBGA	10.000	0.00008	0.001		<LOQ
CBG	10.000	0.000248	0.001		<LOQ
CBDV	10.000	0.000065	0.001		<LOQ
CBDa	10.000	0.00001	0.001		<LOQ

Total THC None Detected	Total CBD None Detected
Total CBG None Detected	Total CBN 0.031%
Other Cannabinoids 86.540%	Total Cannabinoids 86.571%

Xueli Gao
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Aixia Sun
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Sample # AABB338 Completion Date: 2021-03-16

H Heavy Metals Passed (ICP-MS)

Specimen Weight: 249.600 mg

Dilution Factor: 2.000

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Arsenic (As)	100	1500	<LOQ	Cadmium (Cd)	100	500	<LOQ
Lead (Pb)	100	500	<LOQ	Mercury (Hg)	100	3000	<LOQ
Total Contaminant Load (TCL) None Detected							

2,3-butanedione(Diacetyl) Passed (GCMS)

Specimen Weight: 124.300 mg

Dilution Factor: 1.000

Analyte	LOQ (ppm)	Result (ppm)
2,3-Butanedione	0.024	<LOQ

Mycotoxins Passed (LCMS)

Specimen Weight: 157.580 mg

Dilution Factor: 1.000

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

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Batch Date: 2021-03-04
Extracted From: Hemp

Test Reg State: Florida

Production Facility: Carolina Hemp Refinery
Production Date: 2021-03-01

Order # CAR210304-020013
Order Date: 2021-03-04
Sample # AABB338

Sampling Date: 2021-03-08
Lab Batch Date: 2021-03-08
Completion Date: 2021-03-16

Initial Gross Weight: 94.328 g

Pesticides FL V4 **Passed**
(LCMS/GCMS)

Specimen Weight: 157.580 mg

Dilution Factor: 1.000

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Abamectin	28.23	300	<LOQ	Acephate	30	3000	<LOQ
Acequinocyl	48	2000	<LOQ	Acetamiprid	30	3000	<LOQ
Aldicarb	30	100	<LOQ	Azoxystrobin	10	3000	<LOQ
Bifenazate	30	3000	<LOQ	Bifenthrin	30	500	<LOQ
Boscalid	10	3000	<LOQ	Captan	30	3000	<LOQ
Carbaryl	10	500	<LOQ	Carbofuran	10	100	<LOQ
Chlorantraniliprole	10	3000	<LOQ	Chlordane	10	100	<LOQ
Chlorfenapyr	30	100	<LOQ	Chlormequat Chloride	10	3000	<LOQ
Chlorpyrifos	30	100	<LOQ	Clofentazine	30	500	<LOQ
Coumaphos	48	100	<LOQ	Cyfluthrin	30	1000	<LOQ
Cypermethrin	30	1000	<LOQ	Daminozide	30	100	<LOQ
Diazinon	30	200	<LOQ	Dichlorvos	30	100	<LOQ
Dimethoate	30	100	<LOQ	Dimethomorph	48	3000	<LOQ
Ethoprophos	30	100	<LOQ	Etofenprox	30	100	<LOQ
Etoxazole	30	1500	<LOQ	Fenhexamid	10	3000	<LOQ
Fenoxycarb	30	100	<LOQ	Fenpyroximate	30	2000	<LOQ
Fipronil	30	100	<LOQ	Flonicamid	30	2000	<LOQ
Fludioxonil	48	3000	<LOQ	Hexythiazox	30	2000	<LOQ
Imazalil	30	100	<LOQ	Imidacloprid	30	3000	<LOQ
Kresoxim Methyl	30	1000	<LOQ	Malathion	30	2000	<LOQ
Metaxyl	10	3000	<LOQ	Methiocarb	30	100	<LOQ
Methomyl	30	100	<LOQ	methyl-Parathion	10	100	<LOQ
Mevinphos	10	100	<LOQ	Myclobutanil	30	3000	<LOQ
Naled	30	500	<LOQ	Oxamyl	30	500	<LOQ
Paclbutrazol	30	100	<LOQ	Pentachloronitrobenzene	10	200	<LOQ
Permethrin	30	1000	<LOQ	Phosmet	30	200	<LOQ
Piperonylbutoxide	30	3000	<LOQ	Prallethrin	30	400	<LOQ
Propiconazole	30	1000	<LOQ	Propoxur	30	100	<LOQ
Pyrethrins	30	1000	<LOQ	Pyridaben	30	3000	<LOQ
Spinetoram	10	3000	<LOQ	Spinosad	30	3000	<LOQ
Spiromesifen	30	3000	<LOQ	Spirotetramat	30	3000	<LOQ
Spiroxamine	30	100	<LOQ	Tebuconazole	30	1000	<LOQ
Thiacloprid	30	100	<LOQ	Thiamethoxam	30	1000	<LOQ
Trifloxystrobin	30	3000	<LOQ	Total Contaminant Load (TCL)	None Detected		

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 Sample # AABB338 Completion Date: 2021-03-16

Residual Solvents - FL (CBD) Passed (GCMS)

Specimen Weight: 125.600 mg

Dilution Factor: 1.000

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

Listeria Monocytogenes Passed (qPCR)

Specimen Weight: 1024.800 mg

Dilution Factor: 1.000

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

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Production Facility: Carolina Hemp Refinery
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 Order Date: 2021-03-04
 Sample # AABB338

Sampling Date: 2021-03-08
 Lab Batch Date: 2021-03-08
 Completion Date: 2021-03-16

Initial Gross Weight: 94.328 g

Pathogenic SAE (qPCR) **Passed**
(qPCR)

Specimen Weight: 233.380 mg

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	E.Coli	1	Absence in 1g
			Salmonella	1	Absence in 1g

Vitamin E (Tocopheryl Acetate) **Passed**
(LC-MS)

Specimen Weight: N/A Dilution Factor: 1.000

Analyte	LOQ (ppb)	Result (ppb)
Vitamin E Acetate	10	<LOQ

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