



Smithers AMS LLC
 790 Main St
 Wareham, MA 02571
 License #: IL281355
 Phone: 508-295-2550

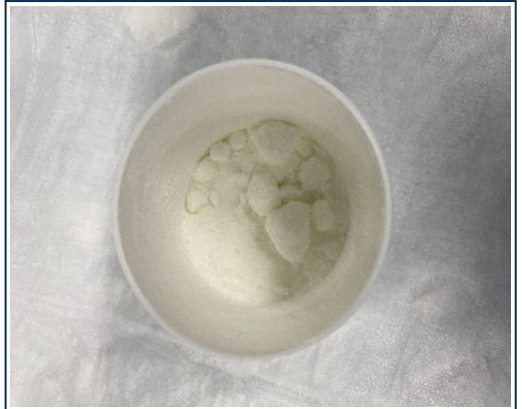
Certificate of Analysis



Customer: Bay State Hemp Company

Address:
 9 Aldrin Rd, Suite 8
 Plymouth MA 02360

Phone: 800-847-4427

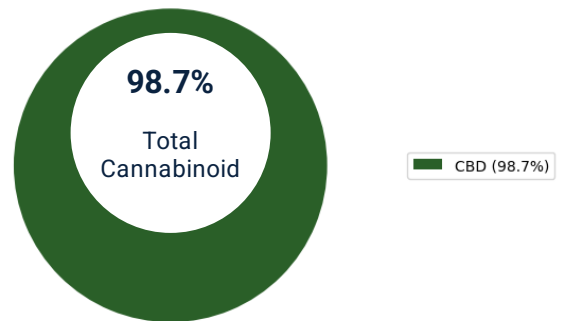


Sample ID: 322
Sample Name: CBD Isolate
Sample Type: Isolate
Received Date: 01/24/2022
Report Date: 02/02/2022
Client Batch ID: 22020D
Client Sample Size: 20.13 g

Results Summary

Cannabinoids 01/26/2022	TESTED
Heavy Metals 01/28/2022	✓ PASS
Microbial Impurities 01/28/2022	✓ PASS
Residual Solvents 01/28/2022	✓ PASS
Mycotoxins 01/27/2022	✓ PASS
Pesticides 02/02/2022	✓ PASS

Cannabinoid Distribution (%)



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Cannabinoids

Date Started: 01/24/2022

Instrument: UPLC-PDA

Date Completed: 01/26/2022

Method: TP-09.001.01 & TP-09.012.01

Analyst: Yuemin Wang Kovaleff

Deviation: N/A

Cannabinoid	Result (%)	Result (mg/g)	LOQ (%)
CBD	98.7	987	0.0383
CBDVA	ND	ND	0.0153
CBDV	ND	ND	0.0153
CBDA	ND	ND	0.0383
CBGA	ND	ND	0.0192
CBG	ND	ND	0.0192
Δ9-THCV	ND	ND	0.0153
THCVA	ND	ND	0.0153
CBN	ND	ND	0.0192
CBNA	ND	ND	0.0153
EXO-THC	ND	ND	0.0153
Δ9-THC	ND	ND	0.0383
Δ8-THC	ND	ND	0.0192
CBC	ND	ND	0.0153
CBL	ND	ND	0.0153
THCA-A	ND	ND	0.0383
CBCA	ND	ND	0.0153
CBLA	ND	ND	0.0153
Total THC	ND	ND	
Total CBD	98.7	987	
Total Cannabinoids	98.7	987	

Total THC = Δ9-THC + Δ8-THC + (THCA-A x 0.877)

Total CBD = CBD + (CBDA x 0.877)

Total Cannabinoids = Sum of all cannabinoids without THC/CBD corrections.

LOD = Limit of Detection; LOQ = Limit of Quantitation; ND = Not Detected.

Heavy Metals

✓ PASS

Date Started: 01/27/2022

Instrument: ICP-MS

Date Completed: 01/28/2022

Method: TP-09.007.01

Analyst: Eric Steele

Deviation: N/A

Heavy Metals	LOQ (ppb)	Limit (ppb)	Status
Arsenic	6.99	200	Pass
Cadmium	6.99	200	Pass
Lead	6.99	500	Pass
Mercury	6.99	100	Pass

Microbial Impurities

✓ PASS

Date Started: 01/25/2022

Instrument: TEMPO & Gene-Up

Date Completed: 01/28/2022

Method: TP-09.010.01 & TP-09.011.01

Analyst: Eric Steele

Deviation: N/A

Microbials	Result (CFU/g)	Limit (CFU/g)	Status
Coliforms	ND	1000	Pass
Bile-Tolerant Gram-Negative Bacteria	ND	1000	Pass
Yeast & Mold	ND	10000	Pass
Aerobic Bacteria	ND	100000	Pass
E.coli	ND		Pass
Salmonella	ND		Pass

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Residual Solvents

✓ PASS

Date Started: 01/26/2022
Instrument: HS-GC-MS

Date Completed: 01/28/2022
Method: TP-09.005.01

Analyst: Yuemin Wang Kovaleff
Deviation: N/A

Residual Solvent	LOQ (ppm)	Limit (ppb)	Status
Ethanol	11.5	5000	Pass
n-Butane	1.15	12	Pass
n-Propane	4.03	12	Pass
Iso-butane	2.18	12	Pass
Methanol	30.5	3000	Pass
n-Pentane	39.8	5000	Pass
Ethyl Ether	11.4	5000	Pass
Acetone	15.2	5000	Pass
Isopropyl Alcohol	10.5	5000	Pass
Acetonitrile	16.3	410	Pass
n-Hexane	19.1	290	Pass
Ethyl Acetate	8.81	5000	Pass
n-Heptane	8.56	5000	Pass
Toluene	3.37	890	Pass
Total Xylenes	4.35	2170	Pass

Mycotoxins

✓ PASS

Date Started: 01/26/2022
Instrument: LC-MS/MS

Date Completed: 01/27/2022
Method: TP-09.009.01

Analyst: Yuemin Wang Kovaleff
Deviation: N/A

Mycotoxins	LOQ (ppb)	Limit (ppb)	Status
Aflatoxin B1	4.83		
Aflatoxin B2	3.62		
Aflatoxin G1	3.62		
Aflatoxin G2	4.83		
Ochratoxin A	3.62		
Total Mycotoxins	3.62	20	Pass

Pesticides

✓ PASS

Date Started: 02/01/2022
Instrument: LC-MS/MS & GC-MS/MS

Date Completed: 02/02/2022
Method: TP-09.008.01 & TP-09.009.01

Analyst: Eric Steele
Deviation: N/A

Pesticide	LOQ (ppb)	Limit (ppb)	Status
Bifenazate	3.14	10	Pass
Bifenthrin	3.14	10	Pass
Cyfluthrin	2.62	10	Pass
Etoxazole	3.14	10	Pass
Imazalil	3.14	10	Pass
Imidacloprid	3.14	10	Pass
Myclobutanil	3.14	10	Pass
Spiromesifen	3.14	10	Pass
Trifloxystrobin	3.14	10	Pass

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Eric Steele
Quality Manager
02/02/2022

END OF REPORT

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