

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Green Apple Gummies
PRODUCT STRENGTH: 10 mg CBD / gummy
BATCH: 210120
BEST BY DATE: 12/2022
HEMP EXTRACT LOT: C0624-001

Click on the links to view third-party reports

Physical Attributes

Test	Method	Specification	Results
Color	Internal	Medium Pink	PASS
Odor	Internal	Sweet, strawberry, lemon	PASS
Appearance	Internal	Medium pink gummies with sugar coating in child proof container	PASS
Primary Package Eval.	Internal	Container clean and free of filth. Container caps tight and seals intact	PASS
Secondary Package Eval.	Internal	Labeling Compliance Checked, Sufficient cushion material exists. Box taped and secure.	PASS

Review of Third-Party Analysis

Panel	Method	Specification	Results*	Pass/Fail
Potency - Total CBD	HPLC-UV DAD	*NLT 10 mg / gummy	11.72 mg	PASS
Potency - D9-THC	HPLC-UV DAD	Complies with CDPHE 6 CCR for Broad Spectrum	ND	PASS
Expanded Pesticide Panel	HPLC-QQQ	LOQ: Complies with CDPHE 6 CCR 1010-21 Industrial Hemp Extract	Below LOQ	PASS
Microbial Escherichia coli (STEC)	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	Absent	PASS
Microbial Salmonella	PCR	Complies with CDPHE 6 CCR 1010-21 - LOQ 1 CFU/25 gram	Absent	PASS
Microbial Yeast and Mold	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ² CFU/gram	Below LOQ	PASS
Microbial Total Coliforms*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ² CFU/gram	Below LOQ	PASS
Microbial Total Aerobic Count*	Culture Plating	Complies with CDPHE 6 CCR 1010-21 - LOQ 10 ³ CFU/gram	Below LOQ	PASS
Heavy Metals Panel	ICP-MS	Arsenic (As): ≤1.5 ppm Cadmium (Cd): ≤0.5 ppm Lead (Pb): ≤0.5 ppm Mercury (Hg): ≤1.5 ppm	Below LOQ	PASS
Mycotoxins	ICP-MS	Total Aflatoxins <20 ppb† Aflatoxin B1 < 5 ppb Ochratoxin < 5ppb	Below LOQ	PASS
Residual Solvents	GC-HS-MSD	LOQ: Complies with CDPHE 6 CCR in effect during MFG*	Below LOQ	PASS

* *Level of Quantitation, † Parts Per Million ‡ Part Per Billion
 CFU/g=Colony Forming Units per Gram
 * Nothing Less Than Manufacture*
 10²=100 CFU
 10³=1,000 CFU

Quality Certified


 Keegan Schlittler
 Quality Assurance Manager

12/13/2021

Date

Green Apple 10 mg CBD BS Gummy

Batch ID or Lot Number: **Composite**
F210004/F210005/F210006

Test: **Potency**

Reported: **12/7/21**

Matrix: **Concentrate**

Test ID: **T000179703**

Started: **12/6/21**

USDA License: **N/A**

Status: **N/A**

Method: **TM14 (HPLC-DAD): Potency - Broad Spectrum Analysis, 0.01% THC (Colorado Panel)**

Received: **12/02/2021 @ 12:45 PM**

Sampler ID: **N/A**

CANNABINOID PROFILE

Compound	LOD (%)	LOQ (%)	Result (%)	Result (mg/g)	Notes
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.004	0.013	ND	ND	N/A
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.005	0.014	ND	ND	
Cannabidiolic acid (CBDA)	0.048	0.164	ND	ND	
Cannabidiol (CBD)	0.046	0.160	0.378	3.78	
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.055	0.175	ND	ND	
Cannabinolic Acid (CBNA)	0.031	0.100	ND	ND	
Cannabinol (CBN)	0.014	0.046	ND	ND	
Cannabigerolic acid (CBGA)	0.046	0.147	ND	ND	
Cannabigerol (CBG)	0.011	0.035	0.026*	0.26*	
Tetrahydrocannabivarinic Acid (THCVA)	0.039	0.124	ND	ND	
Tetrahydrocannabivarin (THCV)	0.010	0.032	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.020	0.068	ND	ND	
Cannabidivarin (CBDV)	0.011	0.038	ND	ND	
Cannabichromenic Acid (CBCA)	0.018	0.057	ND	ND	
Cannabichromene (CBC)	0.019	0.062	ND	ND	
Total Cannabinoids			0.404	4.04	
Total Potential THC**			ND	ND	
Total Potential CBD**			0.378	3.78	

 Jacob Miller
 07-Dec-2021
 01:28 PM

 Ryan Weems
 7-Dec-21
 1:30 PM

PREPARED BY / DATE

APPROVED BY / DATE

Definitions

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)

* Indicates a value below the Limit of Quantitation (LOQ) and above the Limit of Detection (LOD).

** Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.

Total THC = THC + (THCa *(0.877)) and

Total CBD = CBD + (CBDA *(0.877))

Total Cannabinoids result reflects the absolute sum of all cannabinoids detected.

ND = None Detected (Defined by Dynamic Range of the method)

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC.



CDPHE Certified



Certificate #4329.02

27093

 Batch ID or Lot Number:
C0624-001

 Test:
Pesticides

 Reported:
8/11/21

 Matrix:
 Concentrate

 Test ID:
 T000155504

 Started:
 8/10/21

 USDA License:
 N/A

 Status:
 N/A

 Method:
 TM17(LC-QQC LC MS/MS):

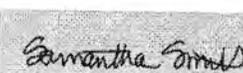
 Received:
 08/05/2021 @ 12:37 PM

 Sampler ID:
 N/A

PESTICIDE DETERMINATION

Compound	LOQ (ppm)	Result (ppm)	Compound	LOQ (ppm)	Result (ppm)	Compound	LOQ (ppm)	Result (ppm)
Acephate	54	ND	Fenoxycarb	54	ND	Paclobutrazol	54	ND
Acetamiprid	54	ND	Fipronil	54	ND	Permethrin	324	ND
Avermectin	324	ND	Flonicamid	54	ND	Phosmet	54	ND
Azoxystrobin	54	ND	Fludioxonil	324	ND	Propos	324	ND
Bifenazate	54	ND	Hexythiazox	54	ND	Propoxur	54	ND
Boscalid	54	ND	Imazalil	324	ND	Pyridaben	324	ND
Carbaryl	54	ND	Imidacloprid	54	ND	Spinosad A	54	ND
Carbofuran	54	ND	Kresoxim-methyl	150	ND	Spinosad D	324	ND
Chlorantraniliprole	54	ND	Malathion	324	ND	Spiromesifen	324	ND
Chlorpyrifos	500	ND	Metaxyl	54	ND	Spirotetramat	324	ND
Clofentezine	324	ND	Methiocarb	54	ND	Spiroxamine 1	54	ND
Diazinon	324	ND	Methomyl	54	ND	Spiroxamine 2	54	ND
Dichlorvos	324	ND	MGK 264 1	324	ND	Tebuconazole	324	ND
Dimethoate	54	ND	MGK 264 2	324	ND	Thiacloprid	54	ND
E-Fenpyroximate	324	ND	Myclobutanil	54	ND	Thiamethoxam	54	ND
Etofenprox	54	ND	Naled	54	ND	Trifloxystrobin	54	ND
Etoxazole	324	ND	Oxamyl	1500	ND			


 Taylor Brevik
 8/11/2021
 4:08:00 PM


 Sam Smith
 8/11/2021
 4:11:00 PM

PREPARED BY / DATE

APPROVED BY / DATE

Definitions

LOQ = Limit of Quantification

ppb = Parts per Billion

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC.



Certificate #4329.02

Green Apple 10 mg CBD BS Gummy

Batch ID or Lot Number: Composite 210117, 210120	Test: Microbial Contaminants	Reported: 12/10/21	
Matrix: Finished Product	Test ID: T000179998	Started: 12/7/21	USDA License: N/A
Status: N/A	Methods: TM25 (qPCR) TM24, TM26, TM27(Culture Plating): Microbial (Colorado Panel)	Received: 12/07/2021 @ 09:30 AM	Sampler ID: N/A

MICROBIAL CONTAMINANTS DETERMINATION

Contaminant	Method	LOD	LLOQ	ULOQ	Result	Notes
Total Aerobic Count*	TM-26, Culture Plating	10 ² CFU/g	10 ³ CFU/g	1.5x10 ⁵ CFU/g	None Detected	Free from visual mold, mildew, and foreign matter
Total Coliforms*	TM-27, Culture Plating	10 ¹ CFU/g	10 ² CFU/g	1.5x10 ⁴ CFU/g	None Detected	
Total Yeast and Mold*	TM-24, Culture Plating	10 ¹ CFU/g	10 ² CFU/g	1.5x10 ⁴ CFU/g	None Detected	
E. coli (STEC)	TM-25, PCR	1 CFU/25 g	NA	NA	Absent	
Salmonella	TM-25, PCR	1 CFU/25 g	NA	NA	Absent	

Brianne Maillot
 Brianne Maillot
 12/10/2021
 09:01:00 AM

Carly Bader
 Carly Bader
 12/10/2021
 09:20:00 AM

PREPARED BY / DATE

APPROVED BY / DATE

Definitions

LOD = Limit of Detection | LLOQ = Lower Limit of Quantitation | ULOQ = Upper Limit of Quantitation

 CFU/g = Colony Forming Units per Gram | STEC = Shiga Toxin-Producing *E. coli*

* Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form.

Examples:
 10² = 100 CFU
 10³ = 1,000 CFU
 10⁴ = 10,000 CFU
 10⁵ = 100,000 CFU

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Certificate #4329.02

27093

Batch ID or Lot Number: C0624-001	Test: Metals	Reported: 8/13/21	
Matrix: Unit Co	Test ID: T000155506	Started: 8/12/21	USDA License: N/A
Status: N/A	Method: TM19 (ICP-MS): Heavy Metals (Colorado Panel)	Received: 08/05/2021 @ 12:37 PM	Sampler ID: N/A

HEAVY METALS DETERMINATION

Compound	Dynamic Range (ppb)	Result (ppb)	Notes
Arsenic	0.044 - 4.39	ND	
Cadmium	0.048 - 4.78	ND	
Mercury	0.044 - 4.38	ND	
Lead	0.044 - 4.38	ND	

Samantha Smith
Sam Smith
13-Aug-21
1:11 PM

PREPARED BY / DATE

Daniel Weidensaul
Daniel Weidensaul
13-Aug-21
1:14 PM

APPROVED BY / DATE

Definitions

ND = None Detected (Defined by Dynamic Range of the method)

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Certificate #4929.02



27093

Batch ID or Lot Number: C0624-001	Test: Mycotoxins	Reported: 8/12/21
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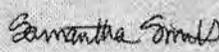
Matrix: Concentrate	Test ID: T000155508	Started: 8/11/21	USDA License: N/A
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Status: N/A	Method: TM18 (UHPLC-QQ LCMS/MS); Mycotoxins (Colorado Panel)	Received: 08/05/2021 @ 12:37 PM	Sampler ID: N/A
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MYCOTOXIN DETERMINATION

Compound	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	5.1 - 137.2	ND	N/A
Aflatoxin B1	1 - 35.5	ND	
Aflatoxin B2	1.1 - 34.7	ND	
Aflatoxin G1	1 - 34.9	ND	
Aflatoxin G2	1.2 - 33.7	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

 Taylor Brevik
12-Aug-21
2:47 PM

 Sam Smith
12-Aug-21
2:50 PM

PREPARED BY / DATE

APPROVED BY / DATE

Definitions

ND = None Detected (Defined by Dynamic Range of the method)

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Certificate #4329.02



27093

Batch ID or Lot Number: **C0624-001** Test: **Residual Solvents** Reported: **8/12/21**

Matrix: N/A Test ID: T000155507 Started: 8/11/21 USDA License: N/A

Status: N/A Methods: TM04 (GC-MS): Residual Solvents (Colorado Panel) Received: 08/05/2021 @ 12:37 PM Sampler ID: N/A

RESIDUAL SOLVENTS DETERMINATION

Solvent	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	71 - 1415	*ND	
Butanes (Isobutane, n-Butane)	133 - 2657	*ND	
Methanol	49 - 984	*ND	
Pentane	73 - 1454	*ND	
Ethanol	78 - 1554	*ND	
Acetone	80 - 1600	*ND	
Isopropyl Alcohol	88 - 1766	*ND	
Hexane	5 - 98	*ND	
Ethyl Acetate	81 - 1624	*ND	
Benzene	0 - 3	*ND	
Heptanes	77 - 1543	*ND	
Toluene	15 - 293	*ND	
Xylenes (m,p,o-Xylenes)	108 - 2169	*ND	

K. Winterheimer Karen Winterheimer
12-Aug-21
3:07 PM

PREPARED BY / DATE

Ryan Weems Ryan Weems
12-Aug-21
3:09 PM

APPROVED BY / DATE

Definitions

* ND = None Detected (Defined by Dynamic Range of the method)

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