



JOY ORGANICS

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Joy Organics Dog Chews
PRODUCT STRENGTH: 2 mg / chew
DOG TREAT LOT NUMBER*: 102523
BEST BY DATE 10/25/25

Physical Attributes

Test	Method	Specification	Results
Color	SOP-100	Brown	PASS
Odor	SOP-100	Beef, grains, somewhat yeasty	PASS
Appearance	SOP-100	Squat cylindrical dog treats a plastic amber container	PASS
Primary Package Eval.	SOP-132	Container clean and free of filth. Container caps tight and shrink bands intact	PASS
Secondary Package Eval.	SOP-132	Labeling Compliance Checked, Cartons sturdy and clean. Sufficient cushion material exists. Box taped and secure.	PASS

Review of Third-Party Analysis

Panel	Method	Specification	Results*	Pass/Fail
Potency - Total CBD	SOP-111	1.9-2.5 mg CBD / ea. LOQ*: 10 PPM† (0.001%)	2.3 mg/chew	PASS
Potency - D9-THC	SOP-111	None Detected LOQ: 10 PPM (0.001%)	ND	PASS
Compliant Pesticide Panel	SOP-111	WIP-100008 : Product specification for Bulk Dog Treats, Oregon Action limits apply	ND	PASS
Microbial - Full Panel	SOP-111	Complies with USP 61/62	ND	PASS
CA Compliant Heavy Metal Panel	SOP-111	Arsenic (As): ≤1.5 PPM Cadmium (Cd): ≤0.5 PPM Mercury (Hg): ≤1.0 PPM Lead (Pb): ≤0.5 PPM	ND	PASS

* Level of Quantitation, † Parts Per Million

Quality Certified by:


Coral Cronin
Quality Assurance Team

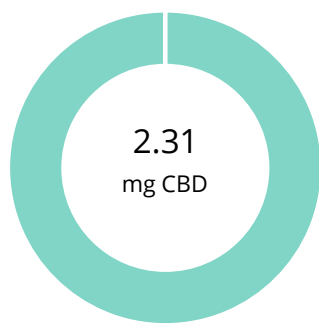
3/24/24

Date

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Batch ID:	102523	Test ID:	T000260214
Type:	Unit	Submitted:	10/27/2023 @ 12:29 PM
Test:	Potency	Started:	10/30/2023
Method:	TM14 (HPLC-DAD)	Reported:	10/31/2023

CANNABINOID PROFILE



CBD 0.05%

CBDa 0.00%

delta 9 THC 0.00%

THCa 0.00%

Compound	LOQ (mg)	Result (mg)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.55	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.63	ND	ND
Cannabidiolic acid (CBDA)	0.64	ND	ND
Cannabidiol (CBD)	0.62	2.31	0.5
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.69	ND	ND
Cannabinolic Acid (CBNA)	0.39	ND	ND
Cannabinol (CBN)	0.18	ND	ND
Cannabigerolic acid (CBGA)	0.58	ND	ND
Cannabigerol (CBG)	0.14	0.31	0.1
Tetrahydrocannabivarinic Acid (THCVA)	0.49	ND	ND
Tetrahydrocannabivarin (THCV)	0.13	ND	ND
Cannabidivarinic Acid (CBDVA)	0.27	ND	ND
Cannabidivarin (CBDV)	0.15	ND	ND
Cannabichromenic Acid (CBCA)	0.22	ND	ND
Cannabichromene (CBC)	0.24	ND	ND
Total Cannabinoids		2.62	0.6
Total Potential THC**		ND	ND
Total Potential CBD**		2.31	0.5

NOTES:

of Servings = 1, Sample Weight=4.5g

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

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


** 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))

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

FINAL APPROVAL

	Sam Smith 31-Oct-2023 2:30 PM		Karen Winternheimer 31-Oct-2023 2:32 PM
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PREPARED BY / DATE

APPROVED BY / DATE

Testing results are based solely upon the sample submitted to SC Laboratories, Inc. SC Laboratories, Inc 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. All decision rulings are in accordance with the MED and results uploaded to METRC. This report may not be reproduced, except in full, without the written approval of SC Laboratories, Inc. ISO/IEC 17025:2017 Accredited A2LA Certificate Number 4329.01



Certificate #4329.02

Beef & Bacon Dog Chews - 2mg CBD

Batch ID or Lot Number:
102523

Test, Test ID and Methods:
Various

Matrix:
Finished Product

Page 2 of 5

Reported:
02Nov2023

Started:
02Nov2023

Received:
01Nov2023

Pesticides

Test ID: T000260532

Methods: TM17

(LC-QQ LC MS/MS)

Dynamic Range (ppb)

Result (ppb)

Abamectin	323 - 2856	ND
Acephate	43 - 2689	ND
Acetamiprid	42 - 2679	ND
Azoxystrobin	44 - 2663	ND
Bifenazate	44 - 2666	ND
Boscalid	42 - 2654	ND
Carbaryl	41 - 2678	ND
Carbofuran	47 - 2640	ND
Chlorantraniliprole	43 - 2675	ND
Chlorpyrifos	42 - 2748	ND
Clofentezine	269 - 2680	ND
Diazinon	272 - 2675	ND
Dichlorvos	258 - 2738	ND
Dimethoate	43 - 2617	ND
E-Fenpyroximate	282 - 2766	ND
Etofenprox	45 - 2792	ND
Etoxazole	281 - 2669	ND
Fenoxycarb	42 - 2699	ND
Fipronil	30 - 2741	ND
Flonicamid	50 - 2736	ND
Fludioxonil	285 - 2644	ND
Hexythiazox	43 - 2789	ND
Imazalil	265 - 2708	ND
Imidacloprid	46 - 2726	ND
Kresoxim-methyl	44 - 2675	ND

Dynamic Range (ppb)

Result (ppb)

Malathion	288 - 2644	ND
Metalaxyl	42 - 2661	ND
Methiocarb	46 - 2675	ND
Methomyl	43 - 2708	ND
MGK 264 1	158 - 1606	ND
MGK 264 2	108 - 1083	ND
Myclobutanil	51 - 2691	ND
Naled	44 - 2648	ND
Oxamyl	44 - 2722	ND
Paclobutrazol	44 - 2667	ND
Permethrin	293 - 2776	ND
Phosmet	45 - 2545	ND
Prophos	280 - 2684	ND
Propoxur	45 - 2661	ND
Pyridaben	292 - 2733	ND
Spinosad A	33 - 2080	ND
Spinosad D	62 - 673	ND
Spiromesifen	265 - 2742	ND
Spirotetramat	284 - 2702	ND
Spiroxamine 1	17 - 998	ND
Spiroxamine 2	27 - 1557	ND
Tebuconazole	279 - 2638	ND
Thiacloprid	43 - 2700	ND
Thiamethoxam	42 - 2694	ND
Trifloxystrobin	48 - 2684	ND

Final Approval



Sam Smith
06Nov2023
07:06:00 AM MST

PREPARED BY / DATE



Karen Winternheimer
06Nov2023
07:14:00 AM MST

APPROVED BY / DATE

Beef & Bacon Dog Chews - 2mg CBD

Batch ID or Lot Number: 102523	Test, Test ID and Methods: Various	Matrix: Finished Product	Page 1 of 5
Reported: 02Nov2023	Started: 02Nov2023	Received: 01Nov2023	

**Residual Solvents -
Colorado Compliance**

Test ID: T000260535

Methods: TM04 (GC-MS): Residual

Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	91 - 1824	ND	
Butanes (Isobutane, n-Butane)	180 - 3593	ND	
Methanol	61 - 1218	ND	
Pentane	94 - 1875	ND	
Ethanol	94 - 1881	ND	
Acetone	97 - 1947	ND	
Isopropyl Alcohol	102 - 2047	ND	
Hexane	6 - 119	ND	
Ethyl Acetate	99 - 1986	ND	
Benzene	0.2 - 3.9	ND	
Heptanes	96 - 1914	ND	
Toluene	18 - 354	ND	
Xylenes (m,p,o-Xylenes)	129 - 2575	ND	

Final ApprovalKaren Winternheimer
02Nov2023
02:35:00 PM MDT

PREPARED BY / DATE



APPROVED BY / DATE

Sam Smith
02Nov2023
02:37:00 PM MDT

Beef & Bacon Dog Chews - 2mg CBD

Batch ID or Lot Number: 102523	Test, Test ID and Methods: Various	Matrix: Finished Product	Page 3 of 5
Reported: 02Nov2023	Started: 02Nov2023	Received: 01Nov2023	

Microbial Contaminants - Colorado Compliance

Test ID: T000260533

Methods: TM25 (qPCR) TM24, TM26,

TM27 (Culture Plating): Microbial

(Colorado Panel)

	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 ² CFU/g	1.0x10 ³ - 1.5x10 ⁵	<LLOQ	
Total Coliforms*	TM27: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	

Final Approval



Brianne Maillot
05Nov2023
01:05:00 PM MST

PREPARED BY / DATE



Eden Thompson-Wright
06Nov2023
10:23:00 AM MST

APPROVED BY / DATE

Heavy Metals - Colorado Compliance

Test ID: T000260534

Methods: TM19 (ICP-MS): Heavy

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.05 - 4.74	ND	
Cadmium	0.05 - 4.80	ND	
Mercury	0.05 - 4.59	ND	
Lead	0.05 - 4.86	ND	

Final Approval



Sam Smith
07Nov2023
02:36:00 PM MST

PREPARED BY / DATE



Karen Winternheimer
07Nov2023
02:38:00 PM MST

APPROVED BY / DATE

Beef & Bacon Dog Chews - 2mg CBD

Batch ID or Lot Number:
102523

Test, Test ID and Methods:
Various

Matrix:
Finished Product

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Reported:
02Nov2023

Started:
02Nov2023

Received:
01Nov2023

Mycotoxins - Colorado Compliance


Test ID: T000260536


Methods: TM18 (UHPLC-QQ)

LCMS/MS: Mycotoxins

	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	1.98 - 124.11	ND	N/A
Aflatoxin B1	0.87 - 32.51	ND	
Aflatoxin B2	2.14 - 32.21	ND	
Aflatoxin G1	0.93 - 32.27	ND	
Aflatoxin G2	1.11 - 32.36	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

Final Approval


Sam Smith
08Nov2023
10:06:00 AM MST
PREPARED BY / DATE


Karen Winternheimer
08Nov2023
10:19:00 AM MST
APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/de73b23c-06b9-495a-92e8-abd46be00c2e>

Definitions

LOD = Limit of Detection, ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation, PPB = Parts per Billion, % = % (w/w) = Percent (weight of analyte / weight of product). ND = None Detected (defined by dynamic range of the method). Total Potential Delta 9-THC or CBD is calculated to take into account the loss of a carboxyl group during decarboxylation step, using the following formulas: Total Potential Delta 9-THC = Delta 9-THC + (Delta 9-THCa \times (0.877)) and Total CBD = CBD + (CBDa \times (0.877)). Fail equates to a concentration level of Delta 9-THC, on a dry weight basis, higher than 0.3 percent + or - the measurement uncertainty. Total Potential THC is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step. Total THC = THC + (THCa \times (0.877)). ALOQ = Above Limit Of Quantitation (defined by dynamic range of the method), CFU/g = Colony Forming Units per Gram. Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form. Examples: 10^2 = 100 CFU, 10^3 = 1,000 CFU, 10^4 = 10,000 CFU, 10^5 = 100,000 CFU.

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Cert #4329.02

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