JOY ORGANICS

CERTIFICATE OF ANALYSIS

PRODUCT NAME:	Joy Organics Dog Chews
PRODUCT STRENGTH:	2 mg / chew
DOG TREAT LOT NUMBER*:	120622, 230707B
BEST BY DATE	12/2024

Click on the links to view third-party reports

Physical Atttributes

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 shrin bands intact	PASS
Secondary Package Eval.	SOP-132	Labeling Compliance Checked, Cartons sturdy and clean. Suffici 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 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 Bu 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: 1/12/2023

Coral Cronin — Date

Quality Assurance Team

Tel: (833) 569-7223
www.joyorganics.com

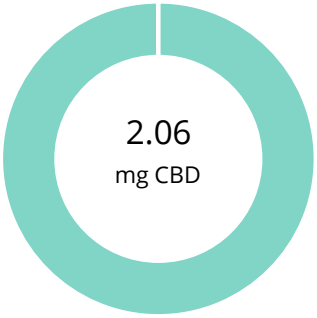
SC Labs®
Formerly Botanacor Labs

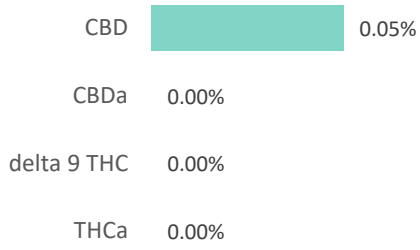
CERTIFICATE OF ANALYSIS

CHEW - CBD Dog Treats 30ct 2mg

Batch ID:	120622	**Test ID:**	T000229798
Type:	Unit	**Submitted:**	12/06/2022 @ 01:30 PM
Test:	Potency	**Started:**	12/5/2022
Method:	TM14 (HPLC-DAD)	**Reported:**	12/7/2022

CANNABINOID PROFILE





Compound	LOQ (mg)	Result (mg)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.63	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.71	ND	ND
Cannabidiolic acid (CBDA)	0.74	ND	ND
Cannabidiol (CBD)	0.72	2.06	0.5
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.79	ND	ND
Cannabinolic Acid (CBNA)	0.45	ND	ND
Cannabinol (CBN)	0.21	ND	ND
Cannabigerolic acid (CBGA)	0.66	ND	ND
Cannabigerol (CBG)	0.16	0.27	0.1
Tetrahydrocannabivarinic Acid (THCVA)	0.56	ND	ND
Tetrahydrocannabivarin (THCV)	0.14	ND	ND
Cannabidivarinic Acid (CBDVA)	0.31	ND	ND
Cannabidivarin (CBDV)	0.17	ND	ND
Cannabichromenic Acid (CBCA)	0.25	ND	ND
Cannabichromene (CBC)	0.28	ND	ND
Total Cannabinoids		**2.33**	**0.6**
Total Potential THC**		ND	ND
Total Potential CBD**		2.06	0.5

% = % (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)

NOTES:
# of Servings = 1, Sample Weight=4.5g

FINAL APPROVAL

K Winternheimer	Karen Winternheime 7-Dec-2022 1:11 PM	Samantha Smith	Sam Smith 7-Dec-2022 1:16 PM
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

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Certificate #4329.02

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CERTIFICATE OF ANALYSIS

CHEW - CBD Dog Treats 30ct 2mg

Batch ID or Lot Number:	Test, Test ID and Methods:	Matrix:	Page 1 of 4
120122	Various	Concentrate	
Reported:	Started:	Received:	
15Dec2022	14Dec2022	14Dec2022	

Residual Solvents - Colorado Compliance

Test ID: T000230868
Methods: TM04 (GC-MS): Residual Solvents

	Dynamic Range (ppm)	**Result** (ppm)	**Notes**
Propane	88 - 1757	ND	
Butanes (Isobutane, n-Butane)	176 - 3510	ND	
Methanol	58 - 1158	ND	
Pentane	95 - 1893	ND	
Ethanol	93 - 1867	ND	
Acetone	95 - 1896	ND	
Isopropyl Alcohol	96 - 1921	ND	
Hexane	6 - 113	ND	
Ethyl Acetate	97 - 1944	ND	
Benzene	0.2 - 3.9	ND	
Heptanes	97 - 1934	ND	
Toluene	17 - 343	ND	
Xylenes (m,p,o-Xylenes)	127 - 2539	ND	

Final Approval

Karen Winternheimer
15Dec2022
01:46:00 PM MST
PREPARED BY / DATE

Sam Smith
15Dec2022
01:49:00 PM MST
APPROVED BY / DATE

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CERTIFICATE OF ANALYSIS

CHEW - CBD Dog Treats 30ct 2mg

Batch ID or Lot Number:	Test, Test ID and Methods:	Matrix:	
120122	Various	Concentrate	
Reported:	Started:	Received:	
15Dec2022	14Dec2022	14Dec2022	

Pesticides

Test ID: T000230865
Methods: TM17

(LC-QQ LC MS/MS)	**Dynamic Range** (ppb)	**Result** (ppb)		**Dynamic Range** (ppb)	**Result** (ppb)
Abamectin	321 - 2637	ND	Malathion	284 - 2755	ND
Acephate	44 - 2805	ND	Metalaxyl	43 - 2742	ND
Acetamiprid	41 - 2778	ND	Methiocarb	44 - 2752	ND
Azoxystrobin	44 - 2739	ND	Methomyl	44 - 2780	ND
Bifenazate	41 - 2757	ND	MGK 264 1	182 - 1636	ND
Boscalid	45 - 2850	ND	MGK 264 2	119 - 1161	ND
Carbaryl	42 - 2760	ND	Myclobutanil	46 - 2750	ND
Carbofuran	41 - 2759	ND	Naled	43 - 2793	ND
Chlorantraniliprole	47 - 2775	ND	Oxamyl	42 - 2780	ND
Chlorpyrifos	53 - 2776	ND	Paclobutrazol	39 - 2755	ND
Clofentezine	273 - 2775	ND	Permethrin	166 - 2753	ND
Diazinon	280 - 2782	ND	Phosmet	41 - 2734	ND
Dichlorvos	286 - 2791	ND	Prophos	275 - 2783	ND
Dimethoate	42 - 2719	ND	Propoxur	41 - 2752	ND
E-Fenpyroximate	294 - 2748	ND	Pyridaben	291 - 2730	ND
Etofenprox	39 - 2748	ND	Spinosad A	34 - 2237	ND
Etoxazole	300 - 2730	ND	Spinosad D	51 - 491	ND
Fenoxycarb	43 - 2747	ND	Spiromesifen	280 - 2753	ND
Fipronil	40 - 2793	ND	Spirotetramat	270 - 2745	ND
Flonicamid	51 - 2761	ND	Spiroxamine 1	18 - 1194	ND
Fludioxonil	256 - 2801	ND	Spiroxamine 2	24 - 1562	ND
Hexythiazox	42 - 2732	ND	Tebuconazole	288 - 2716	ND
Imazalil	257 - 2783	ND	Thiacloprid	43 - 2770	ND
Imidacloprid	47 - 2785	ND	Thiamethoxam	41 - 2788	ND
Kresoxim-methyl	44 - 2789	ND	Trifloxystrobin	41 - 2773	ND

Final Approval

Karen Winternheimer
16Dec2022
09:22:00 AM MST
PREPARED BY / DATE

Sam Smith
16Dec2022
09:32:00 AM MST
APPROVED BY / DATE

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CERTIFICATE OF ANALYSIS

CHEW - CBD Dog Treats 30ct 2mg

Batch ID or Lot Number:	Test, Test ID and Methods:	Matrix:	
120122	Various	Concentrate	
Reported:	Started:	Received:	
15Dec2022	14Dec2022	14Dec2022	

Microbial Contaminants - Colorado Compliance

Test ID: T000230866
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
Salmonella	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	$1.0x10^3$ - $1.5x10^5$	4.6x10^3 CFU/g	
Total Coliforms*	TM27: Culture Plating	10^1 CFU/g	$1.0x10^2$ - $1.5x10^4$	None Detected	

Final Approval

Eden Thompson-Wright
18Dec2022
09:36:00 AM MST
PREPARED BY / DATE

Brianne Maillot
19Dec2022
09:37:00 AM MST
APPROVED BY / DATE

Heavy Metals - Colorado Compliance

Test ID: T000230867
Methods: TM19 (ICP-MS): Heavy Metals

	Dynamic Range (ppm)	**Result** (ppm)	Notes
Arsenic	0.04 - 4.22	ND	
Cadmium	0.05 - 4.63	ND	
Mercury	0.04 - 4.44	ND	
Lead	0.05 - 4.50	ND	

Final Approval

Sam Smith
20Dec2022
08:06:00 AM MST
PREPARED BY / DATE

Karen Winternheimer
20Dec2022
08:07:00 AM MST
APPROVED BY / DATE

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CERTIFICATE OF ANALYSIS

CHEW - CBD Dog Treats 30ct 2mg

Batch ID or Lot Number:	Test, Test ID and Methods:	Matrix:	Page 4 of 4
120122	Various	Concentrate	
Reported:	Started:	Received:	
15Dec2022	14Dec2022	14Dec2022	

Mycotoxins - Colorado Compliance

Test ID: T000230869
Methods: TM18 (UHPLC-QQQ LCMS/MS): Mycotoxins

	Dynamic Range (ppb)	**Result** (ppb)	**Notes**
Ochratoxin A	4.36 - 130.35	ND	N/A
Aflatoxin B1	0.98 - 32.52	ND	
Aflatoxin B2	0.98 - 32.23	ND	
Aflatoxin G1	1.17 - 32.58	ND	
Aflatoxin G2	0.85 - 32.01	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

Final Approval

Sam Smith
22Dec2022
08:42:00 AM MST
PREPARED BY / DATE

Karen Winternheimer
22Dec2022
08:44:00 AM MST
APPROVED BY / DATE

https://results.botanacor.com/api/v1/coas/uuid/13cdde5e-8794-40c2-ae55-5d85745bf285

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 *(0.877)) and Total CBD = CBD + (CBDa *(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 *(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.

Cert #4329.02
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