

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Joy Organics Dog Chews

PRODUCT STRENGTH: 2 mg / chew

121224

DOG TREAT LOT NUMBER*: BEST BY DATE

12/12/2026

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.	ary Package Eval. SOP-132 Container clean and free of filth. Container caps tight and shrin bands intact		PASS
Secondary Package Eval.	ndary 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-1		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 Date

Quality Assurance Team

Tel: (833) 569-7223 FO-106 Certificate of Analysi www.joyorganics.com Rev. 1.1 - Effective Date: 2/20/20

1/3/2025



Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

DATE ISSUED 12/23/2024

SAMPLE DETAILS

SAMPLE NAME: CHEW- 2mg WSP Dog Treats

Infused, Colorado Infused

SAMPLE DETAIL

Batch Number: 121224 **Sample ID:** 241217L021

Date of Sampling: 12/17/2024

Time of Sampling: 10:30 a.m.

Sampler Name:

Sampler Company:

Date Collected: 12/17/2024

Date Received: 12/17/2024

Batch Size:

Sample Size: 1.0 units

Unit Mass:

Serving Size: 4.5 grams per Serving





Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: <LOQ

Total CBD: 0.434 mg/g

Sum of Cannabinoids: 0.455 mg/g

Total Cannabinoids: 0.455 mg/g

Total THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during the decarboxylation step: Total THC = Δ^9 -THC + (THCa (0.877))

Total CBD = CBD + (CBDa (0.877))

Sum of Cannabinoids = Δ^9 -THC + THCa + CBD + CBDa + CBG + CBGa + THCV + THCVa + CBC + CBCa + CBDV + CBDVa + Δ^8 -THC + CBL + CBN Total Cannabinoids = (Δ^9 -THC+0.877*THCa) + (CBD+0.877*CBDa) + (CBG+0.877*CBGa) + (THCV+0.877*THCVa) + (CBC+0.877*CBCa) +

(CBDV+0.877*CBDVa) + Δ 8-THC + CBL + CBN

SAFETY ANALYSIS - SUMMARY

Pesticides: ND PASS Mycotoxins: ⊘PASS Residual Solvents: PASS- GOBI Heavy Metals: ⊘PASS

Microbiology (PCR): PASS Microbiology (Plating): PASS

For quality assurance purposes. Not a Regulatory Hemp Lab Test Report. These results relate only to the sample included on this report. This report shall not be reproduced, except in full, without written approval of the laboratory.

Sample Certification: 6 CCR 1010-21 Colorado Wholesale Food, Industrial Hemp, and Shellfish Regulations; where applicable

Decision Rule: Statements of conformity (e.g. Pass/Fail) to specifications are made in this report without taking measurement uncertainty into account. Where statements of conformity are made in this report, the following decision rules are applied: PASS - Results within limits/specifications. FAIL - Results exceed limits/specifications.

 $\label{eq:continuous} \textbf{References:} \ \ \text{limit of detection (LOD), limit of quantification (LOQ), not detected (ND), not tested (NT), } \\ \mu g/g = ppm, \\ \mu g/kg = ppb, \\ \text{too numerous to count} > 250 \ \ \text{cfu/plate (TNTC), colony-forming unit (cfu)} \\ \end{cases}$

LOC verified by: Randi Vuong Job Title: Lead Laboratory Technician Date: 12/23/2024 Approved by: Josh Wurzer
Job Title: Chief Compliance Officer
Date: 12/23/2024







Cannabinoid Analysis

Tested by high-performance liquid chromatography with diode-array detection (HPLC-DAD).

Method: QSP 1157 - Analysis of Cannabinoids by HPLC-DAD

TOTAL THC: <LOQ

Total THC (Δ⁹-THC+0.877*THCa)

TOTAL CBD: 0.434 mg/g
Total CBD (CBD+0.877*CBDa)

TOTAL CANNABINOIDS: 0.455 mg/g

$$\label{eq:total_constraint} \begin{split} & Total \ Cannabinoids \ (Total \ THC) + (Total \ CBD) + (Total \ CBC) + (Total \ CBC) + (Total \ CBDV) + \Delta^8 - THC + CBL + CBN \end{split}$$

TOTAL CBG: 0.021 mg/g

Total CBG (CBG+0.877*CBGa)

TOTAL THCV: ND

Total THCV (THCV+0.877*THCVa)

TOTAL CBC: ND
Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: ND

Total CBDV (CBDV+0.877*CBDVa)

CANNABINOID TEST RESULTS - 12/23/2024

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBD	0.004 / 0.011	±0.0162	0.434	0.0434
CBG	0.002/0.006	±0.0010	0.021	0.0021
Δ ⁹ -THC	0.002/0.014	N/A	<loq< th=""><th><loq< th=""></loq<></th></loq<>	<loq< th=""></loq<>
CBN	0.001 / 0.007	N/A	<loq< th=""><th><loq< th=""></loq<></th></loq<>	<loq< th=""></loq<>
Δ^8 -THC	0.01 / 0.02	N/A	ND	ND
THCa	0.001 / 0.005	N/A	ND	ND
THCV	0.002/0.012	N/A	ND	ND
THCVa	0.002/0.019	N/A	ND	ND
CBDa	0.001 / 0.026	N/A	ND	ND
CBDV	0.002/0.012	N/A	ND	ND
CBDVa	0.001/0.018	N/A	ND	ND
CBGa	0.002 / 0.007	N/A	ND	ND
CBL	0.003 / 0.010	N/A	ND	ND
СВС	0.003 / 0.010	N/A	ND	ND
CBCa	0.001 / 0.015	N/A	ND	ND
SUM OF CANNAE	BINOIDS		0.455 mg/g	0.0455%

Serving Size: 4.5 grams per Serving

Δ^9 -THC per Serving	<loq< th=""></loq<>
Total THC per Serving	<loq< td=""></loq<>
CBD per Serving	1.953 mg/serving
Total CBD per Serving	1.953 mg/serving
Sum of Cannabinoids per Serving	2.048 mg/serving
Total Cannabinoids per Serving	2.048 mg/serving



Pesticide Analysis

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS). ‡Analytes part of our California Select Panel.

*GC-MS utilized where indicated.

Method: QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS or QSP 1213 - Analysis of Pesticides by GC-MS

PESTICIDE TEST RESULTS - 12/20/2024 ND

COMPOUND	LOD/LOQ (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)
Abamectin	0.032 / 0.097	N/A	ND
Acephate	0.006 / 0.018	N/A	ND
Acequinocyl	0.009 / 0.027	N/A	ND
Acetamiprid	0.016 / 0.049	N/A	ND
Aldicarb	0.030 / 0.090	N/A	ND
Allethrin	0.030 / 0.092	N/A	ND
Atrazine	0.006 / 0.019	N/A	ND
Azadirachtin	0.082 / 0.248	N/A	ND
Azoxystrobin	0.003 / 0.009	N/A	ND
Benzovindiflupyr	0.003 / 0.009	N/A	ND
Bifenazate	0.003 / 0.009	N/A	ND

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Pesticide Analysis Continued

PESTICIDE TEST RESULTS - 12/20/2024 continued ND

COMPOUND	LOD/LOQ (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (μg/g)
Bifenthrin	0.021 / 0.064	N/A	ND
Boscalid	0.003 / 0.009	N/A	ND
Buprofezin [‡]	0.006 / 0.019	N/A	ND
Carbaryl	0.007 / 0.020	N/A	ND
Carbofuran	0.003 / 0.008	N/A	ND
Chlorantraniliprole	0.006 / 0.018	N/A	ND
Chlorfenapyr*	0.005 / 0.015	N/A	ND
Chlorpyrifos	0.013 / 0.039	N/A	ND
Clofentezine	0.003 / 0.009	N/A	ND
Clothianidin	0.008 / 0.025	N/A	ND
Coumaphos	0.003 / 0.010	N/A	ND
Cyantraniliprole	0.003 / 0.010	N/A	ND
Cyfluthrin	0.052 / 0.159	N/A	ND
Cypermethrin	0.051 / 0.153	N/A	ND
Cyprodinil [‡]	0.003 / 0.008	N/A	ND
Daminozide	0.026 / 0.077	N/A	ND
Deltamethrin	0.059 / 0.180	N/A	ND
Diazinon	0.006 / 0.017	N/A	ND
Dichlorvos (DDVP)	0.012 / 0.038	N/A	ND
Dimethoate	0.003 / 0.009	N/A	ND
Dimethomorph	0.016 / 0.050	N/A	ND
Dinotefuran	0.010 / 0.030	N/A	ND
Diuron	0.013 / 0. <mark>040</mark>	N/A	ND
Dodemorph	0.012/0.035	N/A	ND
Endosulfan sulfate	0.016 / 0.048	N/A	ND
Endosulfan-α*	0.004 / 0.014	N/A	ND
Endosulfan-β*	0.006 / 0.019	N/A	ND
Ethoprophos	0.003 / 0.009	N/A	ND
Etofenprox	0.014 / 0.042	N/A	ND
Etoxazole	0.007 / 0.020	N/A	ND
Etridiazole*	0.002 / 0.005	N/A	ND
Fenhexamid	0.003 / 0.008	N/A	ND
Fenoxycarb	0.003 / 0.010	N/A	ND
Fenpyroximate	0.007 / 0.020	N/A	ND
Fensulfothion	0.003 / 0.010	N/A	ND
Fenthion	0.003 / 0.010	N/A	ND
Fenvalerate [‡]	0.033 / 0.099	N/A	ND
Fipronil	0.003 / 0.010	N/A	ND
Flonicamid	0.007 / 0.022	N/A	ND
Fludioxonil	0.003 / 0.010	N/A	ND
Fluopyram [‡]	0.003 / 0.009	N/A	ND

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Pesticide Analysis Continued

PESTICIDE TEST RESULTS - 12/20/2024 continued ND

COMPOUND	LOD/LOQ (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (μg/g)
Hexythiazox	0.003/0.010	N/A	ND
lmazalil	0.003 / 0.009	N/A	ND
Imidacloprid	0.003/0.010	N/A	ND
Iprodione	0.077 / 0.233	N/A	ND
Kinoprene	0.077 / 0.233	N/A	ND
Kresoxim-methyl	0.006 / 0.019	N/A	ND
λ -Cyhalothrin	0.068 / 0.206	N/A	ND
Malathion	0.003 / 0.009	N/A	ND
Metalaxyl	0.003 / 0.010	N/A	ND
Methiocarb	0.003 / 0.008	N/A	ND
Methomyl	0.008 / 0.025	N/A	ND
Methoprene [‡]	0.172 / 0.521	N/A	ND
Mevinphos	0.008 / 0.024	N/A	ND
MGK-264	0.015 / 0.047	N/A	ND
Myclobutanil	0.003 / 0.009	N/A	ND
Naled	0.021 / 0.064	N/A	ND
Novaluron	0.002 / 0.005	N/A	ND
Oxamyl	0.017 / 0.051	N/A	ND
Paclobutrazol	0.003 / 0.010	N/A	ND
Parathion-methyl	0.016 / 0.050	N/A	ND
Pentachloronitro- benzene (Quintozene)*	0.004 / 0.012	N/A	ND
Permethrin	0.056 / 0. <mark>168</mark>	N/A	ND
Phenothrin	0.016 <mark>/0.047</mark>	N/A	ND
Phosmet	0.007/0.020	N/A	ND
Piperonyl Butoxide	0.010 / 0.029	N/A	ND
Pirimicarb	0.003 / 0.009	N/A	ND
Prallethrin	0.015 / 0.046	N/A	ND
Propiconazole	0.027 / 0.080	N/A	ND
Propoxur	0.003 / 0.008	N/A	ND
Pyraclostrobin	0.003/0.010	N/A	ND
Pyrethrins	0.016 / 0.049	N/A	ND
Pyridaben	0.005 / 0.017	N/A	ND
Pyriproxyfen	0.003 / 0.009	N/A	ND
Resmethrin	0.013 / 0.039	N/A	ND
Spinetoram	0.003 / 0.010	N/A	ND
Spinosad	0.003/0.010	N/A	ND
Spirodiclofen	0.031 / 0.093	N/A	ND
Spiromesifen	0.016 / 0.050	N/A	ND
Spirotetramat	0.003 / 0.010	N/A	ND
Spiroxamine	0.020 / 0.062	N/A	ND
Tebuconazole	0.003 / 0.010	N/A	ND

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Pesticide Analysis Continued

PESTICIDE TEST RESULTS - 12/20/2024 continued ND

COMPOUND	LOD/LOQ (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)
Tebufenozide	0.003 / 0.008	N/A	ND
Teflubenzuron	0.007 / 0.022	N/A	ND
Tetrachlorvinphos	0.003 / 0.008	N/A	ND
Tetramethrin	0.021 / 0.063	N/A	ND
Thiabendazole	0.006 / 0.020	N/A	ND
Thiacloprid	0.003 / 0.009	N/A	ND
Thiamethoxam	0.003 / 0.010	N/A	ND
Thiophanate-methyl	0.013 / 0.040	N/A	ND
Trifloxystrobin	0.003 / 0.009	N/A	ND



Mycotoxin Analysis

Mycotoxin analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS).

Method: QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS

MYCOTOXIN TEST RESULTS - 12/20/2024 PASS

COMPOUND	LOD/LOQ (µg/kg)	ACTION LIMIT (µg/kg)	MEASUREMENT UNCERTAINTY (μg/kg)	RESULT (µg/kg)	RESULT
Aflatoxin B1	1.6 / 5.0	5	N/A	ND	PASS
Aflatoxin B2	1.4 / 4.1		N/A	ND	
Aflatoxin G1	1.6 / 4.9		N/A	ND	
Aflatoxin G2	1.6 / 5.0		N/A	ND	
Ochratoxin A	1.6 / 5.0	5	N/A	ND	PASS
Total Aflatoxin		20		ND	PASS

Gobi Hemp

Analytical Report - CDPHE Certified Certificate of Analysis



Manifest: 241217L021 Sample ID: 121224

Sample Name: CHEW- 2mg WSP Dog Treats

Sample Type: Concentrate

Test Performed: Hemp Lab

Report No: R-2408290004-V1

 Receive Date:
 2024-08-29

 Test Date:
 2024-10-25

 Report Date:
 2024-10-28

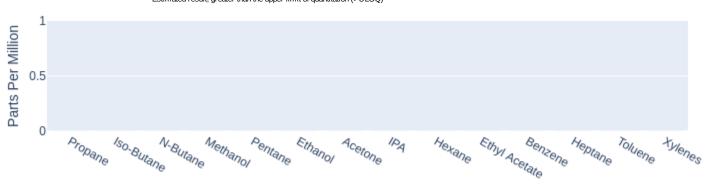
 Sample Condition:
 Good

Method Reference: GH-OP-08

Scope: The content of fifteen residual solvents was determined by an in-house developed method for Headspace-Gas Chromatography with Flame Ionization Detection.

Solvents	LOD (ppm)	LOQ (ppm)	Parts Per Million (ppm)
Propane	135	372	ND
Iso-Butane	82	490	ND
N-Butane	107	490	ND
Methanol	38	120	ND
Pentane	73	100	ND
Ethanol	50	200	ND
Acetone	82	200	ND
IPA	40	200	ND
Hexane	25	50	ND
Ethyl Acetate	57	200	ND
Benzene	0.65	1	ND
Heptane	137	200	ND
Toluene	75	100	ND
Xylenes	112	200	ND

ND - not detected; LOD - limit of detection; LOQ - limit of quantitation; ULOQ - upper limit of quantitation; *Estimated result, greater than the upper limit of quantitation (>ULOQ)



Lab Comments:

Jon Person Director of Communication

2024-10-28

Date

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Heavy Metals Analysis

Heavy metal analysis utilizing inductively coupled plasma-mass spectrometry (ICP-MS).

Method: QSP 1160 - Analysis of Heavy Metals by ICP-MS

HEAVY METALS TEST RESULTS - 12/20/2024 PASS

	COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
	Arsenic	0.02 / 0.1	1.5	N/A	<loq< th=""><th>PASS</th></loq<>	PASS
	Cadmium	0.02 / 0.05	0.5	N/A	<loq< th=""><th>PASS</th></loq<>	PASS
	Lead	0.04 / 0.1	0.5	N/A	ND	PASS
	Mercury	0.002 / 0.01	1.5	N/A	ND	PASS
_						



Microbiology Analysis

PCR AND PLATING

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbiological contaminants.

Method: QSP 1221 - Analysis of Microbiological Contaminants

Analysis conducted by $3M^{TM}$ Petrifilm and plate counts of microbiological contaminants.

 $\textbf{Method:} \ \text{QSP 6794} - \text{Plating with } 3M^{\text{TM}} \ \text{Petrifilm}^{\text{TM}}$

MICROBIOLOGY TEST RESULTS (PCR) - 12/23/2024 PASS

COMPOUND	ACTION LIMIT	RESULT	RESULT
Salmonella spp.	Not Detected in 25g	ND	PASS
Shiga toxin-producing Escher	ichia coli Not Detected in 25g	ND	PASS

MICROBIOLOGY TEST RESULTS (PLATING) - 12/23/2024 PASS

COMPOUND	ACTION LIMIT (cfu/g)	RESULT (cfu/g)	RESULT
Coliforms	100	ND	PASS
Total Aerobic Bacteria	10000	1200.0	PASS
Total Yeast and Mold	1000	ND	PASS