

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Joy Organics CBD Dog Chews
PRODUCT STRENGTH: 2 mg / chew
BATCH: 22080C
BEST BY DATE: 11/2023
Bulk LOT: 3004364

Click on the links to view third-party reports

Physical Attributes

Test	Method	Specification	Results
Color	Internal	Brown	PASS
Odor	Internal	Beef and grains, with some yeast	PASS
Appearance	Internal	Squat cylindrical dog treats a plastic amber container	PASS
Primary Package Eval.	Internal	Container clean and free of filth. Container caps tight and pressure seal is intact.	PASS
Secondary Package Eval.	Internal	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	HPLC-UV DAD	LOQ*: ≥ 2 mg / chew	2.1 mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: $<0.01\%$ (broad spectrum)	$<0.01\%$	PASS
Pesticide Panel	LCMS-MS	Not Tested	N/A	N/A
Microbial Escherichia coli (STEC)	qPCR	Complies with USP 61/62	Absent	PASS
Microbial Salmonella	qPCR	Complies with USP 61/62	Absent	PASS
Microbial Yeast and Mold	Culture Plating	Complies with USP 61/62	Below LOQ	PASS
Microbial Total Coliforms	Culture Plating	Complies with USP 61/62	Below LOQ	PASS
Microbial Total Aerobic Count	Culture Plating	Complies with USP 61/62	3.5×10^3	PASS
Heavy Metals	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	LCMS-MS	Total Aflatoxins <20 ppb†† Aflatoxin B1 <20 ppb Ochratoxin <20 ppb	Below LOQ	PASS
Residual Solvents	GC-MS	Not Tested	N/A	N/A

*Level of Quantification
† Parts Per Million †† Part Per Billion

Quality Certified Keegan Schlittler 03/29/2022
 Keegan Schlittler
 Quality Assurance Manager Date



Certificate of Analysis

Sample: DE11119027-004

Harvest/Lot ID: N/A

Batch#: N/A

Seed to Sale# 1A4000B00010DZ500000088Z

Batch Date: N/A

Sample Size Received: 48 gram

Total Weight/Volume: N/A

Retail Product Size: N/A gram

Ordered : 11/18/21

sampled : 11/18/21

Completed: 11/27/21

Sampling Method: SOP-024

PASSED

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Nov 27, 2021 |

License # 405R-00011

815 Woolen Rd Suite 110

Colorado Springs, CO, 80915, US

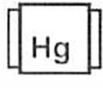
PRODUCT IMAGE



SAFETY RESULTS



Pesticides



Heavy Metals
PASSED



Microbials
PASSED



Mycotoxins
PASSED



Residuals Solvents



Filtration



Water Activity



Moisture



Homogeneity



Terpenes
NOT TESTED

CANNABINOID RESULTS



Total THC
0.003%



Total CBD
0.05%



Total Cannabinoids
0.054%



Cannabinoid Profile Test

Analyzed by
1251

Weight
4.000g

Extraction date :
11/22/21 06:11:31

Extracted By :
JVA

Analysis Method -SOP-020 (R15)

Reviewed On - 11/23/21 15:07:42

Batch Date : 11/22/21 10:45:53

Analytical Batch -DE002697POT

Instrument Used ; Agilent 1100 "Falcor" Running On : 11/22/21 19:00:41

Reagent	Dilution	Consums. ID	Consums. ID
101221 101	80	07051275	923C4-923AK
101221 102		1119999	909525560258
101221 103		8G045	
101221 104		R1KB34782	
101221 105		296076054	
101221 106		12311-108CC 108	

For information on our methods visit our website at www.kaychalabs.com. For more information on our methods visit our website at www.kaychalabs.com. For more information on our methods visit our website at www.kaychalabs.com.



879 Federal Blvd
Denver, CO, 80204, USA

Certificate of Analysis

PASSED

Customer Information

615 Wooten Rd Suite 110
Colorado Springs, CO, 80915, US
Telephone: 719-574-2100
Email: info@kaycha.com
License #: 405P-00033

Sample : DE11119027-004
Harvest/LOT ID : N/A
Batch# : N/A
Sample Size Received : 3.96 gram
Sampled : 11/22/21
Ordered : 11/18/21
Total Weight/Volume : N/A
Completed : 11/22/21 Expires: 11/27/22
Sample Method : SOP-024

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Microbials

PASSED



Mycotoxins

PASSED

Analyte
TOTAL YEAST AND MOLD
SHIGA TOXIN PRODUCING ESCHERICHIA COLI, STEC
SALMONELLA SPECIES
TOTAL AEROBIC
TOTAL COLIFORM

LOD

Result

NOT DETECTED IN 200g
NOT DETECTED IN 200g
NOT DETECTED IN 200g
ND
N

Analyte	LOD	Units	Result	Action Level
AFLATOXIN G2	0.103	ppb	ND	20
AFLATOXIN G1	0.180	ppb	ND	20
AFLATOXIN B2	0.0504	ppb	ND	20
AFLATOXIN B1	1.327	ppb	ND	20
OCHRATOXIN A+ AFLATOXINS	0.0491	ppb	ND	20

Analysis Method -SOP-060 (MS)
Analytical Batch -DE020803MYE | Reviewed On - 11/22/21 14:27:00
Instrument Used -Scienc 5500 (Grav - Phylogensis)
Running On :
Batch Date : 11/22/21 08:28:54

Analysis Method -SOP-061 (R2) | SOP-062 (R2) | SOP-063 (R1)
Analytical Batch -DE020803MIS | Batch Date - 11/22/21 15:06:40
Instrument Used - Microbiol - Full Panel
Running On : 11/22/21 15:33:25

Analyzed by	Weight	Extraction date	Extracted By
9	27.24g	11/22/21 04:21:19	6

Reagent	Reagent	Reagent	Dilution	Consums. ID	Consums. ID
20051948	110221805	11102181	1	14558-15626-1560	8
11102182	08183190	122215 25		80896-21104-0250	N710-2712
11102180	08152707	122021806		710115-301-0	250470
20051948	10801903	110221806		030622897	10954
20051948	10232121	111021806		010622898	10102
111921806	10277101	02202153		02005-11102-115	CK-2055130

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Analyzed by	Weight	Extraction date	Extracted By
1696	0.1703g	11/22/21 02:11:10	1696

Analysis Method -SOP-051 (R5)
Analytical Batch -DE027011HEA | Reviewed On - 11/24/21 10:27:56
Instrument Used : Shimadzu 2030 ICP-MS
Running On : 11/23/21 17:38:56
Batch Date : 11/23/21 09:38:11



Heavy Metals

PASSED

Reagent	Dilution	Consums. ID
08177114	ND	0450P-0007
10277102		12211-0007-008
07163004		12214-02368
12222100		

Metal	LOD	Unit	Result	Action Level
ARSENIC	0.0020	ppm	0.051	1.5
CADMIUM	0.0014	ppm	0.010	0.5
MERCURY	0.0035	ppm	ND	1
LEAD	0.0101	ppm	0.040	1

Analyzed by	Weight	Extraction date	Extracted By
7	0.2207g	11/23/21 17:11:31	2696

Analysis Method -SOP-050 (R5)
Analytical Batch -DE027011HEA | Reviewed On - 11/24/21 10:27:56
Instrument Used : Shimadzu 2030 ICP-MS
Running On : 11/23/21 17:38:56
Batch Date : 11/23/21 09:38:11


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CHEW

Batch ID or Lot Number: 22080A	Test: Microbial Contaminants	Reported: 3/28/22	
Matrix: Finished Product	Test ID: T000199905	Started: 3/25/22	USDA License: N/A
Status: N/A	Methods: TM25 (qPCR) TM24, TM26, TM27(Culture Plating): Microbial	Received: 03/25/2022 @ 10:31 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	3.5x10 ³ CFU/g	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	
STEC	TM-25, PCR	10 ⁰ CFU/25 g	NA	NA	Absent	
Salmonella	TM-25, PCR	10 ⁰ CFU/25 g	NA	NA	Absent	


 Jackson Osaghae-Nosa
 3/28/2022
 4:16:00 PM


 Brianne Maillot
 3/28/2022
 4:34:00 PM

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

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.



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