

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Joy Organics Passionfruit THCV Gummies - Kosher Certified
PRODUCT STRENGTH: 10 mg THCV / gummy
BATCH: 22108A
BEST BY DATE: HEMP 04/05/2024
EXTRACT LOT: 0005920

Physical Attributes


Test	Method	Specification	Results
Color	Joy Internal	Medium Pink to Red	PASS
Odor	Joy Internal	Sweet, passionfruit	PASS
Appearance	Joy Internal	Medium pink to red gummies with sugar coating in child proof container	PASS
Primary Package Eval.	Joy Internal	Container clean and free of filth. Container caps tight and seals intact	PASS
Secondary Package Eval.	Joy 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 THCV	HPLC-UV DAD	*NLT 10 mg / gummy	11.27mg	PASS
Potency - D9-THC	HPLC-UV DAD	LOQ: <0.01% (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 1010-21 Industrial Hemp Extract	Below LOQ	PASS

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

Quality Certified


 Name _____
 Title _____

5/18/22

Date

April 19, 2022

Order No. 533461
Sample No. 1123098

SAMPLE INFORMATION

Description THCVGummy
Lot Number 22108A
Category Non-Inhalable Edible (Gummy)
Received April 18, 2022

ANALYTICAL RESULTS

Analysis Cannabinoid Profile Extended
Instrument Liquid Chromatography Diode Array Detector (LC-DAD) MF-
Method CHEM-15
Analysis Date April 18, 2022 to April 19, 2022

Cannabinoid	mg/g	%	mg/serving
Δ8-THC	ND	ND	ND
Δ8-THCV	0.92	0.092	3.07
Δ9-THC	ND	ND	ND
Δ9-THCA	ND	ND	ND
THCV	2.46	0.246	8.20
THCVA	ND	ND	ND
CBD	ND	ND	ND
CBDA	ND	ND	ND
CBC	ND	ND	ND
CBCA	ND	ND	ND
CBDV	ND	ND	ND
CBDVA	ND	ND	ND
CBG	ND	ND	ND
CBGA	ND	ND	ND
CBN	ND	ND	ND
CBL	ND	ND	ND
CBT	ND	ND	ND
Δ8-THC Acetate*	ND	ND	ND
Δ9-THC Acetate*	ND	ND	ND
9R-Hexahydrocannabinol*	ND	ND	ND
9S-Hexahydrocannabinol*	ND	ND	ND
Total THC	ND	ND	ND
Total CBD	ND	ND	ND
Total Cannabinoids	3.38	0.338	11.27
Total Active Cannabinoids	3.38	0.338	11.27
Serving Weight (g)	3.3323		

*These cannabinoids do not fall under Anresco's ISO 17025 scope due to the lack of available Certified Reference Materials. They were quantified using available analytical reference standards.

Reported by
Anresco, Inc.




Derek Moy
Senior Analyst

April 19, 2022

Limit of Detection: 0.067 mg/g
Limit of Quantitation: 0.2 mg/g
ND = None Detected
<LOQ = Below Limit of Quantitation
<LOD = Below Limit of Detection

If there are any questions with this report, please contact "compliance@anresco.com".

THCV Gummies

Batch ID or Lot Number: 22108A	Test, Test ID and Methods: Various	Matrix: Finished Product	Page 1 of 3
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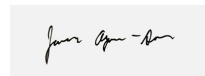
**Microbial
Contaminants -
Colorado Compliance**

Test ID: T000203338
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	None Detected	
Total Coliforms*	TM27: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	

Final Approval


Brianne Maillot
18Apr2022
01:53:00 PM MDT
PREPARED BY / DATE


Jackson Osaghae-Nosa
18Apr2022
03:14:00 PM MDT
APPROVED BY / DATE


THCV Gummies


Batch ID or Lot Number: 22108A	Test, Test ID and Methods: Various	Matrix: Finished Product	Page 3 of 3
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Mycotoxins - Colorado Compliance

 Test ID: T000203341
 Methods: TM18 (UHPLC-QQQ)

LCMS/MS: Mycotoxins	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	3.22 - 132.08	ND	N/A
Aflatoxin B1	1.11 - 32.53	ND	
Aflatoxin B2	1.08 - 32.59	ND	
Aflatoxin G1	0.99 - 32.43	ND	
Aflatoxin G2	1.02 - 32.27	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

Final Approval

 Ryan Weems
 19Apr2022
 12:45:00 PM MDT
 PREPARED BY / DATE


 Sam Smith
 19Apr2022
 12:48:00 PM MDT
 APPROVED BY / DATE

<https://results.botanacor.com/api/v1/coas/uuid/64b94291-bba8-4dc5-a4ab-2b972ce635a9>

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: 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. ISO/IEC 17025:2017 Accredited by A2LA. Some tests listed on this COA may not be within our scope of A2LA accreditation. Please visit [A2LA for more details](#).


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THCV Gummies

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**Residual Solvents -
Colorado Compliance**

Test ID: T000203340

Methods: TM04 (GC-MS): Residual

Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	104 - 2080	ND	
Butanes (Isobutane, n-Butane)	212 - 4239	ND	
Methanol	65 - 1309	68	
Pentane	108 - 2150	ND	
Ethanol	110 - 2210	>2210	
Acetone	108 - 2170	ND	
Isopropyl Alcohol	106 - 2130	ND	
Hexane	7 - 131	ND	
Ethyl Acetate	108 - 2154	ND	
Benzene	0.2 - 4.5	ND	
Heptanes	103 - 2055	ND	
Toluene	19 - 386	ND	
Xylenes (m,p,o-Xylenes)	136 - 2727	ND	

Final Approval

Hannah Wright
19Apr2022
04:38:00 PM MDT

PREPARED BY / DATE



Ryan Weems
19Apr2022
04:52:00 PM MDT

APPROVED BY / DATE

THCV Gummies


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**Heavy Metals -
Colorado Compliance**

Test ID: T000203339

Methods: TM19 (ICP-MS): Heavy

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.04 - 4.13	ND	
Cadmium	0.04 - 4.37	ND	
Mercury	0.04 - 4.01	ND	
Lead	0.04 - 4.02	ND	

Final Approval

Daniel Weidensaul
20Apr2022
05:14:00 PM MDT

PREPARED BY / DATE



Ryan Weems
20Apr2022
05:25:00 PM MDT

APPROVED BY / DATE

THCV Gummies

Batch ID or Lot Number: 22108A	Test, Test ID and Methods: Various	Matrix: Finished Product	Page 6 of 7
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Pesticides


Test ID: T000203337

Methods: TM17

(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)		Dynamic Range (ppb)	Result (ppb)	
Abamectin	341 - 2597	ND		Malathion	285 - 2779	ND
Acephate	46 - 2776	ND		Metalaxyl	47 - 2796	ND
Acetamiprid	37 - 2805	ND		Methiocarb	46 - 2714	ND
Azoxystrobin	44 - 2691	ND		Methomyl	40 - 2812	ND
Bifenazate	43 - 2724	ND		MGK 264 1	190 - 1563	ND
Boscalid	80 - 2676	ND		MGK 264 2	126 - 1114	ND
Carbaryl	40 - 2777	ND		Myclobutanil	40 - 2766	ND
Carbofuran	44 - 2774	ND		Naled	41 - 2784	ND
Chlorantraniliprole	53 - 2654	ND		Oxamyl	36 - 2821	ND
Chlorpyrifos	50 - 2706	ND		Paclobutrazol	40 - 2764	ND
Clofentezine	282 - 2755	ND		Permethrin	272 - 2650	ND
Diazinon	277 - 2781	ND		Phosmet	41 - 2792	ND
Dichlorvos	249 - 2827	ND		Prophos	302 - 2728	ND
Dimethoate	41 - 2778	ND		Propoxur	42 - 2732	ND
E-Fenpyroximate	296 - 2597	ND		Pyridaben	268 - 2712	ND
Etofenprox	39 - 2737	ND		Spinosad A	36 - 2214	ND
Etoxazole	280 - 2707	ND		Spinosad D	53 - 487	ND
Fenoxycarb	41 - 2786	ND		Spiromesifen	276 - 2733	ND
Fipronil	85 - 2589	ND		Spirotetramat	325 - 2636	ND
Flonicamid	38 - 2820	ND		Spiroxamine 1	18 - 1151	ND
Fludioxonil	320 - 2707	ND		Spiroxamine 2	24 - 1544	ND
Hexythiazox	47 - 2730	ND		Tebuconazole	277 - 2813	ND
Imazalil	277 - 2840	ND		Thiacloprid	42 - 2792	ND
Imidacloprid	44 - 2773	ND		Thiamethoxam	44 - 2845	ND
Kresoxim-methyl	56 - 2658	ND		Trifloxystrobin	42 - 2720	ND

Final Approval


 Ryan Weems
 21Apr2022
 12:42:00 PM MDT
 PREPARED BY / DATE


 Sam Smith
 21Apr2022
 12:49:00 PM MDT
 APPROVED BY / DATE

THCV Gummies

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<https://results.botanacor.com/api/v1/coas/uuid/9df7aa9f-aaab-424c-a553-e2aafc13056b>

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