

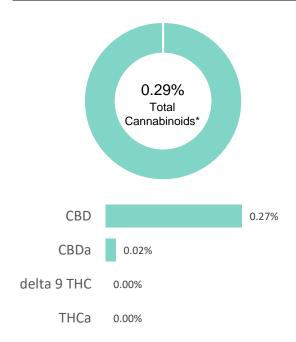
CERTIFICATE OF ANALYSIS

10170 Church Ranch Way, Ste 400 Westminster, CO 80021

384893

Batch ID:	384893	Test ID:	T000099902
Reported:	5-Oct-2020	Method:	TM14
Туре:	Concentrate		
Test:	Potency		

CANNABINOID PROFILE



% = % (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)

Compound	LOQ (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA	A-A) 0.02	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC	0.01	ND	ND
Cannabidiolic acid (CBDA)	0.01	0.02	0.2
Cannabidiol (CBD)	0.01	0.27	2.7
Delta 8-Tetrahydrocannabinol (Delta 8THC	0.01	ND	ND
Cannabinolic Acid (CBNA)	0.03	ND	ND
Cannabinol (CBN)	0.01	ND	ND
Cannabigerolic acid (CBGA)	0.02	ND	ND
Cannabigerol (CBG)	0.01	ND	ND
Tetrahydrocannabivarinic Acid (THCVA)	0.02	ND	ND
Tetrahydrocannabivarin (THCV)	0.01	ND	ND
Cannabidivarinic Acid (CBDVA)	0.01	ND	ND
Cannabidivarin (CBDV)	0.00	ND	ND
Cannabichromenic Acid (CBCA)	0.02	ND	ND
Cannabichromene (CBC)	0.02	ND	ND
Total Cannabinoids		0.29	2.9
Total Potential THC**	·	ND	ND
Total Potential CBD**		0.29	2.9

NOTES:

N/A

FINAL APPROVAL

Jefuz Win

Tyler Wiese 5-Oct-2020 3:26 PM

An 37/

Greg Zimpfer 5-Oct-2020 3:43 PM

PREPARED BY / DATE APPROVED BY / DATE

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 17025:2005 Accredited A2LA Certificate Number 4329.02





CERTIFICATE OF ANALYSIS

10170 CHURCH RANCH WAY, STE 400 WESTMINSTER, CO 80021

384893

Batch ID:	384893	Test ID:	T000099903
Reported:	5-Oct-2020	Method:	TM24, TM25, TM26, TM27, TM28
Type:	Concentrate		
Test:	Microbial Contaminants		

MICROBIAL CONTAMINANTS

Contaminant	Result (CFU/g)*	
Total Aerobic Count**	None Detected	
Total Coliforms**	None Detected	
Total Yeast and Molds**	None Detected	
E. coli	Absent	
STEC and 0157 E. coli	None Detected	
Salmonella	None Detected	

^{*} CFU/g = Colony Forming Unit per Gram

Examples: 10^2 = 100 CFU

10³ = 1,000 CFU 10⁴ = 10,000 CFU 10⁵ = 100,000 CFU

NOTES:

Free from visual mold, mildew, and foreign matter

TYM: None Detected

PREPARED BY / DATE

Total Aerobic: None Detected Coliforms: None Detected

FINAL APPROVAL

Tori King 5-Oct-2020 1:40 PM

APPROVED BY / DATE

Greg Zimpfer 5-Oct-2020 3:09 PM

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 17025:2005 Accredited A2LA Certificate Number 4329.03





Certificate #4329.03

^{**} Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form.



Report Date: 19-Oct-2020

Report Status: Final

Certificate of Analysis

10170 Church Ranch Westminster Colorado 80021 United States

ample Name:	384893	Eurofins Sa	ample: 9905129	
oject ID		Receipt Date	e 02-Oct-2020	
O Number	CVD	Receipt Con	dition Ambient tempera	ture
ot Number	384893	Login Date	01-Oct-2020	
ample Serving Size		Date Started		
		Sampled	Sample results a	
		Online Orde		
Analysis				Result
-	lass Spectrometry			
Arsenic				.0100 ppm
Cadmium				00500 ppm
Lead				00500 ppm
Mercury	a Plata Caust *		<0.0	00500 ppm
Enterobacteriacea				10 CELL/=
Enterobacteriacea			<	10 CFU/g
Glyphosate and Al	WIPA			100 pa/a
Glyphosate AMPA				100 ng/g 100 ng/g
		1 514		
Analysis Mycotoxins in Rav	v Matariala	Limit	Result	Pass/Fail
Aflatoxin B1	v Materiais		<0.500 ppb	
Aflatoxin B2			<0.500 ppb	
Aflatoxin G1			<0.500 ppb	
Aflatoxin G2			<0.500 ppb	
Ochratoxin A		20 ppb	<1.00 ppb	Pass
Sum of B1 B2 G1	and G2	20 ppb	<2.00 ppb	Pass
	lysis for hemp products - 60+ compour		·2.00 pps	1 400
Abamectin	nysis for flemp products - 00 · compour	ius	<0.30 mg/kg	
Aldicarb			<0.10 mg/kg	
Aldicarb sulfone (Aldoxycarh)		<0.10 mg/kg	
Aldicarb sulfoxide			<0.10 mg/kg	
Azoxystrobin			<0.10 mg/kg	
Bifenazate			<0.10 mg/kg	
Bifenthrin			<0.10 mg/kg	
Carbaryl			<0.10 mg/kg	
Carbofuran			<0.10 mg/kg	
Carbofuran-3-hyd	roxy-		<0.10 mg/kg	
	•		<0.10 mg/kg	
Chlorantraniliprole	-		~0.10 mg/kg	

* This analysis or component is not ISO accredited.



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Final

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Certificate of Analysis

10170 Church Ranch Westminster Colorado 80021 United States

Sample Name:	384893	Eurofins Sample:	9905129	
Project ID		Receipt Date	02-Oct-2020	
PO Number	CVD	Receipt Condition	Ambient temperatu	ıre
Lot Number	384893	Login Date	01-Oct-2020	
		Date Started	05-Oct-2020	
Sample Serving Size		Sampled	Sample results app	olv as received
		Online Order	13484-1438B9BA	,
Analysis		Limit	Result	Pass/Fail
•	alysis for hemp products - 60+ compo	ounds		
Chlordane, trans			<0.10 mg/kg	
Chlorfenapyr			<0.10 mg/kg	
Chlorpyrifos			<0.10 mg/kg	
Coumaphos			<0.10 mg/kg	
Cyfluthrin			<0.10 mg/kg	
Cypermethrin			<0.10 mg/kg	
Cyproconazole (2 diastereoisomers)		<0.10 mg/kg	
Cyprodinil			<0.10 mg/kg	
Dichlorvos			<0.10 mg/kg	
Diclobutrazol			<0.10 mg/kg	
Dipropetryn			<0.10 mg/kg	
Disulfoton			<0.10 mg/kg	
Endosulfan I (alp	ha-isomer)		<0.20 mg/kg	
Endosulfan II (be	eta-isomer)		<0.20 mg/kg	
Endosulfan sulfa	te		<0.20 mg/kg	
Epoxiconazole			<0.10 mg/kg	
Ethiofencarb			<0.10 mg/kg	
Etofenprox			<0.10 mg/kg	
Etoxazole			<0.10 mg/kg	
Fenoxycarb			<0.10 mg/kg	
Fenpropathrin			<0.10 mg/kg	
Fenvalerate/Esfe	envalerate (sum of isomers)		<0.20 mg/kg	
Fipronil			<0.10 mg/kg	
Fipronil desulfiny	1		<0.10 mg/kg	
Fipronil sulfone			<0.10 mg/kg	
lmazalil			<0.10 mg/kg	
Imidacloprid			<0.10 mg/kg	
Malathion			<0.10 mg/kg	
Methiocarb			<0.10 mg/kg	
Methiocarb sulfo	ne		<0.10 mg/kg	

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Sample Name:	384893			Eurofins Sample:	9905129	
Project ID				Receipt Date	02-Oct-2020	
O Number	CVD			Receipt Condition	Ambient temperat	ure
ot Number	384893			Login Date	01-Oct-2020	
Sample Serving Size	•			Date Started	05-Oct-2020	
				Sampled	Sample results ap	ply as received
				Online Order	13484-1438B9BA	
<u>Analysis</u>			Limit		Result	Pass/Fail
Multi-Residue Ana	alysis for hemp pr	oducts - 60+ compou	ınds			
Methiocarb sulfor	xide				<0.10 mg/kg	
Methomyl					<0.10 mg/kg	
Mevinphos (E- a	nd Z-isomers)				<0.10 mg/kg	
Myclobutanil					<0.10 mg/kg	
Naled (Dibrom)					<0.10 mg/kg	
Paclobutrazol					<0.10 mg/kg	
Permethrin (sum	of isomers)				<0.10 mg/kg	
Propoxur					<0.10 mg/kg	
Spinetoram (spi	nosyns J and L)				<0.10 mg/kg	
Spinosad (spinos	syns A and D)				<0.10 mg/kg	
Spirodiclofen					<0.10 mg/kg	
Spiromesifen					<0.10 mg/kg	
Spirotetramat					<0.10 mg/kg	
Spiroxamine (2 d	liastereoisomers)				<0.10 mg/kg	
Tebuconazole					<0.10 mg/kg	
Thiabendazole					<0.10 mg/kg	
Thiabendazole-5	-hydroxy-				<0.10 mg/kg	
Thiacloprid					<0.10 mg/kg	
Trifloxystrobin					<0.10 mg/kg	
Metolachlor					<0.10 mg/kg	
Pyrethrum (total)					<1.0 mg/kg	
Analysis		LOQ	Limit		Result	Pass/Fail
Residual Solvents	s - Class 1, 2a, 2b	and 3				
1,1,1-Trichloroetl	hane	10 ppm	10 ppm		<10 ppm	Pass
1,1-Dichloroethe	ne	8 ppm	8 ppm		<8 ppm	Pass
1,2-Dichloroetha	ne	5 ppm	5 ppm		<5 ppm	Pass
Benzene		2 ppm	2 ppm		<2 ppm	Pass
Carbon Tetrachlo	oride	4 ppm	4 ppm		<4 ppm	Pass
1,2-Dimethoxyetl		100 ppm	100 ppn	1	<100 ppm	Pass
1,4-Dioxane	· -	380 ppm	380 ppn		<380 ppm	Pass

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Sample Name:	384893		Eurofins Sample:	9905129	
Project ID			Receipt Date	02-Oct-2020	
PO Number	CVD		Receipt Condition	Ambient temperat	ure
Lot Number	384893		Login Date	01-Oct-2020	
Sample Serving Size	•		Date Started	05-Oct-2020	
			Sampled	Sample results ap	ply as received
			Online Order	13484-1438B9BA	
Analysis		LOQ	Limit	Result	Pass/Fail
Residual Solvents	s - Class 1, 2a, 2l				
Acetonitrile		410 ppm	410 ppm	<410 ppm	Pass
Chlorobenzene		360 ppm	360 ppm	<360 ppm	Pass
Chloroform		60 ppm	60 ppm	<60 ppm	Pass
1,2-Dichloroethe	ne	1870 ppm	1870 ppm	<1870 ppm	Pass
Cumene		70 ppm	70 ppm	<70.0 ppm	Pass
Cyclohexane		3880 ppm	3880 ppm	<3880 ppm	Pass
Methanol		3000 ppm	3000 ppm	<3000 ppm	Pass
Methylbutylketon	e	50 ppm	50 ppm	<50 ppm	Pass
Methylcyclohexa	ne	1180 ppm	1180 ppm	<1180 ppm	Pass
Methylene Chlori	ide	600 ppm	600 ppm	<600 ppm	Pass
n-Hexane		290 ppm	290 ppm	<290 ppm	Pass
Nitromethane		50 ppm	50 ppm	<50 ppm	Pass
Pyridine		200 ppm	200 ppm	<200 ppm	Pass
Tetrahydrofuran		720 ppm	720 ppm	<720 ppm	Pass
Tetralin		96 ppm	96 ppm	<96.0 ppm	Pass
Toluene		890 ppm	890 ppm	<890 ppm	Pass
Trichloroethylene	e	80 ppm	80 ppm	<80 ppm	Pass
Xylenes(O,M,P +	- EB)	2170 ppm	2170 ppm	<2170 ppm	Pass
1-Butanol		200 ppm	5000 ppm	<200 ppm	Pass
1-Pentanol		200 ppm	5000 ppm	<200 ppm	Pass
1-Propanol		200 ppm	5000 ppm	<200 ppm	Pass
2-Butanol		200 ppm	5000 ppm	<200 ppm	Pass
Methylethylketon	e	200 ppm	5000 ppm	<200 ppm	Pass
3-Methyl-1-butan	nol	200 ppm	5000 ppm	<200 ppm	Pass
Acetic Acid Butyl	Ester	200 ppm	5000 ppm	<200 ppm	Pass
Acetone		200 ppm	5000 ppm	<200 ppm	Pass
Anisole		200 ppm	5000 ppm	<200 ppm	Pass
Diethyl Ether		200 ppm	5000 ppm	<200 ppm	Pass
Ethanol		200 ppm	5000 ppm	<200 ppm	Pass

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Project ID			Receipt Date	02-Oct-2020	
O Number	CVD		Receipt Condition	Ambient tempera	ature
ot Number	384893		Login Date	01-Oct-2020	
Sample Serving Size			Date Started	05-Oct-2020	
_			Sampled	Sample results a	pply as received
			Online Order	13484-1438B9B	A
Analysis		LOQ	Limit	Result	Pass/Fail
Residual Solvent	s - Class 1, 2a, 2b a	and 3			
Ethyl Acetate		200 ppm	5000 ppm	<200 ppm	Pass
Ethyl Formate		500 ppm	5000 ppm	<500 ppm	Pass
2-Methyl-1-propa	anol	200 ppm	5000 ppm	<200 ppm	Pass
Isobutyl Acetate		200 ppm	5000 ppm	<200 ppm	Pass
2-Propanol		200 ppm	5000 ppm	<200 ppm	Pass
Isopropyl Acetat	е	200 ppm	5000 ppm	<200 ppm	Pass
Methyl Acetate		200 ppm	5000 ppm	<200 ppm	Pass
Methylisobutylke	etone	200 ppm	5000 ppm	<200 ppm	Pass
tert-Butylmethyl	Ether	200 ppm	5000 ppm	<200 ppm	Pass
n-Heptane		200 ppm	5000 ppm	<200 ppm	Pass
n-Pentane		200 ppm	5000 ppm	<200 ppm	Pass
Propyl Acetate		200 ppm	5000 ppm	<200 ppm	Pass
Total Class 3 Re	sidual Solvents	5000 ppm	5000 ppm	<5000 ppm	Pass

Method References Testing Location

Elements by ICP Mass Spectrometry (ICP_MS_S)

Food Integrity Innovation-Madison

3301 Kinsman Blvd Madison, WI 53704 USA

Official Methods of Analysis, Method 2011.19 and 993.14, AOAC INTERNATIONAL, (Modified).

Paquette, L.H., Szabo, A., Thompson, J.J., "Simultaneous Determination of Chromium, Selenium, and Molybdenum in

Nutritional Products by Inductively Coupled Plasma/Mass Spectrometry: Single-Laboratory Validation," Journal of AOAC International, 94(4): 1240 - 1252 (2011).

Enterobacteriaceae Plate Count (EBPC)

EML New Berlin

2345 S 170th St New Berlin, WI 53151 USA

Compendium of Methods for the Microbiological Examination of Foods: Enterobacteriaceae, Coliforms, and Escherichia coli as Quality and Safety Indicators, Chapter 8, 4th Edition, 2001.

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Printed: 19-Oct-2020 12:13 pm Page 5 of 6



Report Date: 19-Oct-2020

Report Status: Final

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10170 Church Ranch
Westminster Colorado 80021 United States

Method References Testing Location

Glyphosate and AMPA (GLY AMPA S)

Food Integrity Innovation-Madison

3301 Kinsman Blvd Madison, WI 53704 USA

Monsanto Company Method ME-1466-02, "High Throughput Assay for Glyphosate and AMPA in Raw Agricultural Commodities and Processed Fractions Using LC/MS/MS".

Multi-Residue Analysis for hemp products - 60+ compounds (PEST HEMP)

Food Integrity Innovation-Madison

3301 Kinsman Blvd Madison, WI 53704 USA

Official Methods of Analysis, AOAC Official Method 2007.01, Pesticide Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate, AOAC INTERNATIONAL (modified).

CEN Standard Method EN 15662: Food of plant origin - Determination of pesticide residues using GC-MS and/or LC-MS/

 $MS\ following\ acetonitrile\ extraction/partitioning\ and\ clean-up\ by\ dispersive\ SPE\ -\ QuEChERS\ method.$

List of the tested pesticides and their limits of quantification (LOQs) are available upon request.

Mycotoxins in Raw Materials (MYCO_REG_S)

Food Integrity Innovation-Madison

3301 Kinsman Blvd Madison, WI 53704 USA

Varga, E., Glauner, T., Koppen, R., Mayer, K., Sulyok, M., Schumacher, R., Krska, R. and Berthiller, F., "Stable isotope dilution assay for the accurate determination of mycotoxins in maize by UHPLC-MS/MS," Analytical and BioAnalytical Chemistry, 402:2675-2686 (2012).

Residual Solvents - Class 1, 2a, 2b and 3 (USPR_S)

Food Integrity Innovation-Madison

3301 Kinsman Blvd Madison, WI 53704 USA

United States Pharmacopeia, 38nd Rev. - National Formulary 33th Ed., Method <467>, USP Convention, Inc., Rockville, MD (2015). (Modified).

Testing Location(s)

Released on Behalf of Eurofins by

Food Integrity Innovation-Madison

Edward Ladwig - President Eurofins Food Chemistry Testing Madison

Eurofins Food Chemistry Testing Madison, Inc. 3301 Kinsman Blvd Madison WI 53704 800-675-8375





2918.01

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