

CONSOLIDATED TEST RESULTS SUMMARY

Please see the following pages for full test results.

BULK SKU CHOC.FS.DS4.66

BATCH # EF36

PRODUCT NAME CBD Chocolate

SERVING SIZE 2 squares (~9.67g)

LABORATORY: Columbia Laboratories

OREGON ACCREDITATION: OR100028

LOQ: Limit Of Quantitation

LOD: Limit Of Detection

1 g = 10⁻³ kg = 10³ mg = 10⁶

µg 1 mg/kg = 1 ppm = 1000
ppb

POTENCY	PER SERVING	PER GRAM	Percent
Cannabidiol (CBD)	32.96 mg/serving	3.41 mg/g	0.34 %
Total THC (d9-THC, THCA)	<LOQ mg/serving	<LOQ mg/g	<LOQ %
Cannabigerol (CBG)	0.42 mg/serving	0.04 mg/g	0.00 %
Cannabinol (CBN)	<LOQ mg/serving	<LOQ mg/g	<LOQ %
Cannabichromene (CBC)	<LOQ mg/serving	<LOQ mg/g	<LOQ %
Tetrahydrocannabinolic Acid (THCA)	<LOQ mg/serving	<LOQ mg/g	<LOQ %
Delta-9-THC (d9-THC)	0.35 mg/serving	0.04 mg/g	0.00 %
Delta-8-THC (d8-THC)	<LOQ mg/serving	<LOQ mg/g	<LOQ %

HEAVY METALS	PER SERVING	PER GRAM	REGULATORY ACTION LEVEL
Arsenic	<LOQ µg/serving	<LOQ µg/g	10 µg/day ⁽¹⁾
Cadmium	2.57 µg/serving	0.27 µg/g	4.1 µg/day ⁽¹⁾
Lead	<LOQ µg/serving	<LOQ µg/g	6 µg/day ⁽¹⁾
Mercury	<LOQ µg/serving	<LOQ µg/g	2 µg/day ⁽¹⁾

PESTICIDES	REGULATORY ACTION LEVEL
None of the other 59 pesticides tested found above limit of detection in the sample.	10 ppb ⁽¹⁾

RESIDUAL SOLVENTS	Results	REGULATORY ACTION LEVEL
Ethanol	<LOQ µg/g	50,000 mg/day
Heptane	<LOQ µg/g	50,000 mg/day
None of the 34 residual solvents tested found above limit of quantitation in the sample.		

MICROBIAL	PASS/FAIL
Yeast & Mold	Pass
Coliform	Pass



1. American Herbal Pharmacopoeia. (2014). Cannabis Inflorescence: Standards of Identity, Analysis, and Quality Control. Washington DC: AHP.



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794



Report Number: 22-013348/D004.R000
Report Date: 11/07/2022
ORELAP#: OR100028
Purchase Order:
Received: 10/31/22 15:17

Customer: Etz Hayim Holdings
Product identity: FORM-CHOC.FS.DS4.66-EF36
Client/Metric ID: .
Laboratory ID: 22-013348-0003

Summary

Potency:

Analyte per 1g	Result	Limits	Units	Status	
CBD per 1g	3.39		mg/1g		CBD-Total per Serving Size 3.41 mg/1g
CBG per 1g	0.0437		mg/1g		
Δ9-THC per 1g	0.0363		mg/1g		THC-Total per Serving Size <LOQ
(Reported in milligrams per serving)					

Residual Solvents:

All analytes passing and less than LOQ.

Pesticides:

All analytes passing and less than LOQ.

Metals:

Analyte	Result	Units	Limit	Status
Cadmium	0.266	mg/kg	0.500	pass

Microbiology:

Less than LOQ for all analytes.



12423 NE Whitaker Way
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Purchase Order:
Received: 10/31/22 15:17

Customer: Etz Hayim Holdings
 16427 NE Airport Way
 PORTLAND 97230
 United States of America (USA)

Product identity: FORM-CHOC.FS.DS4.66-EF36

Client/Metric ID: .

Sample Date:

Laboratory ID: 22-013348-0003

Evidence of Cooling: No

Temp: 19.3 °C

Relinquished by: Client

Serving Size #1: 1 g

Sample Results

Potency per 1g	Method: J AOAC 2015 V98-6 (mod) ^b	Units mg/se	Batch: 2209379	Analyze: 11/1/22 7:39:00 PM	
Analyte	Result	Limits	Units	LOQ	Notes
CBC per 1g	< LOQ		mg/1g	0.0328	
CBC-A per 1g	< LOQ		mg/1g	0.0328	
CBC-Total per 1g	< LOQ		mg/1g	0.0616	
CBD per 1g	3.39		mg/1g	0.0328	
CBD-A per 1g	< LOQ		mg/1g	0.0328	
CBD-Total per 1g	3.41		mg/1g	0.0616	
CBDV per 1g	< LOQ		mg/1g	0.0328	
CBDV-A per 1g	< LOQ		mg/1g	0.0328	
CBDV-Total per 1g	< LOQ		mg/1g	0.0613	
CBE per 1g	< LOQ		mg/1g	0.0328	
CBG per 1g	0.0437		mg/1g	0.0328	
CBG-A per 1g	< LOQ		mg/1g	0.0328	
CBG-Total per 1g	< LOQ		mg/1g	0.0613	
CBL per 1g	< LOQ		mg/1g	0.0328	
CBL-A per 1g	< LOQ		mg/1g	0.0328	
CBL-Total per 1g	< LOQ		mg/1g	0.0616	
CBN per 1g	< LOQ		mg/1g	0.0328	
CBT per 1g	< LOQ		mg/1g	0.0328	
Δ8-THCV per 1g	< LOQ		mg/1g	0.0328	
Δ10-THC per 1g	< LOQ		mg/1g	0.0328	
Δ8-THC per 1g	< LOQ		mg/1g	0.0328	
Δ9-THC per 1g	0.0363		mg/1g	0.0328	
exo-THC per 1g	< LOQ		mg/1g	0.0328	
THC-A per 1g	< LOQ		mg/1g	0.0328	
THC-Total per 1g	< LOQ		mg/1g	0.0616	
THCV per 1g	< LOQ		mg/1g	0.0328	
THCV-A per 1g	< LOQ		mg/1g	0.0328	
THCV-Total per 1g	< LOQ		mg/1g	0.0617	
Total Cannabinoids per 1g	3.54		mg/1g		



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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method	Status	Notes
E.coli	< LOQ		cfu/g	10	2209329	11/03/22 AOAC 991.14 (Petrifilm) ^P		
Total Coliforms	< LOQ		cfu/g	10	2209329	11/03/22 AOAC 991.14 (Petrifilm) ^P		
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2209331	11/04/22 AOAC 2014.05 (RAPID) ^P		
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2209331	11/04/22 AOAC 2014.05 (RAPID) ^P		

Solvents **Method:** Residual Solvents by GC/MS^b **Units** µg/g **Batch** 2209454 **Analyze** 11/03/22 02:23 PM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
1,4-Dioxane	< LOQ	380	100	pass		2-Butanol	< LOQ	5000	200	pass	
2-Ethoxyethanol	< LOQ	160	30.0	pass		2-Methylbutane (Isopentane)	< LOQ		200		
2-Methylpentane	< LOQ		30.0			2-Propanol (IPA)	< LOQ	5000	200	pass	
2,2-Dimethyl butane	< LOQ		30.0			2,2-Dimethylpropane (neo-pentane)	< LOQ		200		
2,3-Dimethyl butane	< LOQ		30.0			3-Methylpentane	< LOQ		30.0		
Acetone	< LOQ	5000	200	pass		Acetonitrile	< LOQ	410	100	pass	
Benzene	< LOQ	2.00	1.00	pass		Butanes (sum)	< LOQ	5000	400	pass	
Cyclohexane	< LOQ	3880	200	pass		Ethanol	< LOQ		200		
Ethyl acetate	< LOQ	5000	200	pass		Ethyl benzene	< LOQ		200		
Ethyl ether	< LOQ	5000	200	pass		Ethylene glycol	< LOQ	620	200	pass	
Ethylene oxide	< LOQ	50.0	20.0	pass		Hexanes (sum)	< LOQ	290	150	pass	
Isopropyl acetate	< LOQ	5000	200	pass		Isopropylbenzene (Cumene)	< LOQ	70.0	30.0	pass	
m,p-Xylene	< LOQ		200			Methanol	< LOQ	3000	200	pass	
Methylene chloride	< LOQ	600	60.0	pass		Methylpropane (Isobutane)	< LOQ		200		
n-Butane	< LOQ		200			n-Heptane	< LOQ	5000	200	pass	
n-Hexane	< LOQ		30.0			n-Pentane	< LOQ		200		
o-Xylene	< LOQ		200			Pentanes (sum)	< LOQ	5000	600	pass	
Propane	< LOQ	5000	200	pass		Tetrahydrofuran	< LOQ	720	100	pass	
Toluene	< LOQ	890	100	pass		Total Xylenes	< LOQ		400		
Total Xylenes and Ethyl benzene	< LOQ	2170	600	pass							



Pesticides											
Method: AOAC 2007.01 & EN 15662 (mod) ^b						Units mg/kg		Batch 2209390		Analyze 11/02/22 09:43 AM	
Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin [‡]	< LOQ	0.50	0.250	pass		Acephate [‡]	< LOQ	0.40	0.200	pass	
Acequinocyl [‡]	< LOQ	2.0	1.00	pass		Acetamiprid [‡]	< LOQ	0.20	0.100	pass	
Aldicarb [‡]	< LOQ	0.40	0.200	pass		Azoxystrobin [‡]	< LOQ	0.20	0.100	pass	
Bifenazate [‡]	< LOQ	0.20	0.100	pass		Bifenthrin [‡]	< LOQ	0.20	0.100	pass	
Boscalid [‡]	< LOQ	0.40	0.200	pass		Carbaryl [‡]	< LOQ	0.20	0.100	pass	
Carbofuran [‡]	< LOQ	0.20	0.100	pass		Chlorantraniliprole [‡]	< LOQ	0.20	0.100	pass	
Chlorfenapyr [‡]	< LOQ	1.0	0.500	pass		Chlorpyrifos [‡]	< LOQ	0.20	0.100	pass	
Clofentezine [‡]	< LOQ	0.20	0.100	pass		Cyfluthrin [‡]	< LOQ	1.0	0.500	pass	
Cypermethrin [‡]	< LOQ	1.0	0.500	pass		Daminozide [‡]	< LOQ	1.0	0.500	pass	
Diazinon [‡]	< LOQ	0.20	0.100	pass		Dichlorvos [‡]	< LOQ	1.0	0.500	pass	
Dimethoate [‡]	< LOQ	0.20	0.100	pass		Ethoprophos [‡]	< LOQ	0.20	0.100	pass	
Etofenprox [‡]	< LOQ	0.40	0.200	pass		Etoazole [‡]	< LOQ	0.20	0.100	pass	
Fenoxycarb [‡]	< LOQ	0.20	0.100	pass		Fenpyroximate [‡]	< LOQ	0.40	0.200	pass	
Fipronil [‡]	< LOQ	0.40	0.200	pass		Flonicamid [‡]	< LOQ	1.0	0.400	pass	
Fludioxonil [‡]	< LOQ	0.40	0.200	pass		Hexythiazox [‡]	< LOQ	1.0	0.400	pass	
Imazalil [‡]	< LOQ	0.20	0.100	pass		Imidacloprid [‡]	< LOQ	0.40	0.200	pass	
Kresoxim-methyl [‡]	< LOQ	0.40	0.200	pass		Malathion [‡]	< LOQ	0.20	0.100	pass	
Metalaxyl [‡]	< LOQ	0.20	0.100	pass		Methiocarb [‡]	< LOQ	0.20	0.100	pass	
Methomyl [‡]	< LOQ	0.40	0.200	pass		MGK-264 [‡]	< LOQ	0.20	0.100	pass	
Myclobutanil [‡]	< LOQ	0.20	0.100	pass		Naled [‡]	< LOQ	0.50	0.250	pass	
Oxamyl [‡]	< LOQ	1.0	0.500	pass		Paclobutrazole [‡]	< LOQ	0.40	0.200	pass	
Parathion-Methyl [‡]	< LOQ	0.20	0.100	pass		Permethrin [‡]	< LOQ	0.20	0.100	pass	
Phosmet [‡]	< LOQ	0.20	0.100	pass		Piperonyl butoxide [‡]	< LOQ	2.0	1.00	pass	
Prallethrin [‡]	< LOQ	0.20	0.100	pass		Propiconazole [‡]	< LOQ	0.40	0.200	pass	
Propoxur [‡]	< LOQ	0.20	0.100	pass		Pyrethrin I (total) [‡]	< LOQ	1.0	0.500	pass	
Pyridaben [‡]	< LOQ	0.20	0.100	pass		Spinosad [‡]	< LOQ	0.20	0.100	pass	
Spiromesifen [‡]	< LOQ	0.20	0.100	pass		Spirotetramat [‡]	< LOQ	0.20	0.100	pass	
Spiroxamine [‡]	< LOQ	0.40	0.200	pass		Tebuconazole [‡]	< LOQ	0.40	0.200	pass	
Thiacloprid [‡]	< LOQ	0.20	0.100	pass		Thiamethoxam [‡]	< LOQ	0.20	0.100	pass	
Trifloxystrobin [‡]	< LOQ	0.20	0.100	pass							

Metals										
Analyte	Result	Limits	Units	LOQ	Batch	Analyzed Method		Status	Notes	
Arsenic	< LOQ	1.500	mg/kg	0.0199	2209433	11/02/22	AOAC 2013.06 (mod.) ^b	pass		
Cadmium	0.266	0.500	mg/kg	0.0199	2209433	11/02/22	AOAC 2013.06 (mod.) ^b	pass		
Lead	< LOQ	0.500	mg/kg	0.0199	2209433	11/02/22	AOAC 2013.06 (mod.) ^b	pass		
Mercury	< LOQ	3.000	mg/kg	0.00993	2209433	11/02/22	AOAC 2013.06 (mod.) ^b	pass		



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Report Number: 22-013348/D004.R000
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Received: 10/31/22 15:17

These test results are representative of the individual sample selected and submitted by the client.

Abbreviations

Limits: Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220, CCR title 16-division 42. BCC-section 5723

Limit(s) of Quantitation (LOQ): The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

Ⓟ = ISO/IEC 17025:2017 accredited method.

* = TNI accredited analyte.

Units of Measure

cfu/g = Colony forming units per gram

g = g

µg/g = Microgram per gram

mg/kg = Milligram per kilogram = parts per million (ppm)

mg/1g = Milligram per 1g

% = Percentage of sample

% wt = µg/g divided by 10,000

Approved Signatory

Derrick Tanner
General Manager



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503-254-1794



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12423 NE Whitaker Way Portland OR 97230 p.503-254-1794

Cannabis Chain of Custody Record

ETZHAYM 22-013348



ORE

Etz Hayim Holdings

Field ID		Date/Time Collected		Pesticides - OR 59 compounds	Pesticide Multi-Residue - 379 compounds	Potency	Residual Solvents	Water Activity	Moisture	Terpenes	Micro: Yeast and Mold	Micro: E.Coli and Total Coliform	Heavy Metals	Mycotoxins	Other	Matrix	Weight	Serving size for edibles	Comments/Metric ID
[REDACTED]		[REDACTED]				X													
CYCL-SLZ.D9.CH5-EJ55		10/27 1:22				X										Beverage		mg/g	LazNat Discount
CYCL-SLZ.D9.CH5-EI23		10/27 4:01				X										Beverage		mg/g	
FORM-CHOC.FS.DS4.66-EF36				X		X	X				X	X	X			Snack		mg/g	Parallel Path
RM-ORG.FLVR.KYLIME-RM2169											X	X							
RM-FLVR.WTRMLN-RM1882											X	X							

Project Name:

- Report Instructions:
- Send to State - METRC
- Email Final Results:
- Fax Final Results
- Cash/Check/CC/Net 30

Other:

Collected By:	Relinquished By:	Date:	Time:	Received by:	Date:	Time:	Lab Use Only:
	[REDACTED]						Client Alias:
<input checked="" type="checkbox"/> Standard (5 day)							Order Number:
<input type="checkbox"/> Rush (3-4 day) (1.5x Standard)							Proper Container
<input type="checkbox"/> Priority Rush (2 day) (2x Standard)							Sample Condition
							Temperature: 19.3
							Shipped Via: client dropoff
							Evidence of cooling: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SUBMISSION OF SAMPLES WITH TESTING REQUIREMENTS TO PIXIS WILL BE UNDERSTOOD TO BE AN AGREEMENT FOR SERVICES IN ACCORDANCE WITH THE CONDITIONS LISTED ON THE BACK OF THIS FORM

Revision: 1.02 Control#: CF023
Effective 01/31/2019 Revised 01/31/2019

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Page 1 of 2



12423 NE Whitaker Way
Portland, OR 97230
503-254-1794



Report Number: 22-013348/D004.R000
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Received: 10/31/22 15:17

Revision 1 Documen D 7148
Legacy D Workshee Valida ed 04/20/2021

Laboratory Quality Control Results

JAOAC2015 V986 Batch ID: 2209379

Analyte	LCS	Result	Spike	Units	% Rec	Limits	Evaluation	Notes
CBDVA	2	0.0345	0.034	%	103	80.0 - 120	Acceptable	
CBDV	2	0.0375	0.037	%	103	80.0 - 120	Acceptable	
CBE	2	0.0352	0.034	%	103	80.0 - 120	Acceptable	
CBDA	1	0.0333	0.035	%	94.9	90.0 - 110	Acceptable	
CBGA	1	0.0335	0.035	%	95.9	80.0 - 120	Acceptable	
CBG	1	0.0350	0.037	%	95.4	80.0 - 120	Acceptable	
CBD	1	0.0343	0.037	%	93.5	90.0 - 110	Acceptable	
THCV	2	0.0357	0.035	%	102	80.0 - 120	Acceptable	
d8THCV	2	0.0358	0.035	%	101	80.0 - 120	Acceptable	
THCVA	2	0.0331	0.033	%	101	80.0 - 120	Acceptable	
CBN	1	0.0344	0.036	%	95.8	90.0 - 110	Acceptable	
exo-THC	2	0.0346	0.034	%	101	80.0 - 120	Acceptable	
d9THC	1	0.0353	0.037	%	94.3	90.0 - 110	Acceptable	
d8THC	1	0.0355	0.035	%	101	90.0 - 110	Acceptable	
CBL	2	0.0322	0.032	%	100.0	80.0 - 120	Acceptable	
d10THC	1	0.0313	0.034	%	92.3	80.0 - 120	Acceptable	
CBG	2	0.0362	0.036	%	101	80.0 - 120	Acceptable	
THCA	1	0.0336	0.034	%	97.7	90.0 - 110	Acceptable	
CBCA	2	0.0336	0.034	%	97.9	80.0 - 120	Acceptable	
CBLA	2	0.0331	0.035	%	95.0	80.0 - 120	Acceptable	
CBT	2	0.0344	0.036	%	95.8	80.0 - 120	Acceptable	

Analyte	Result	LOQ	Units	Limits	Evaluation	Notes
CBDVA	<LOQ	0.003	%	< 0.003	Acceptable	
CBDV	<LOQ	0.003	%	< 0.003	Acceptable	
CBE	<LOQ	0.003	%	< 0.003	Acceptable	
CBDA	<LOQ	0.003	%	< 0.003	Acceptable	
CBGA	<LOQ	0.003	%	< 0.003	Acceptable	
CBG	<LOQ	0.003	%	< 0.003	Acceptable	
CBD	<LOQ	0.003	%	< 0.003	Acceptable	
THCV	<LOQ	0.003	%	< 0.003	Acceptable	
d8THCV	<LOQ	0.003	%	< 0.003	Acceptable	
THCVA	<LOQ	0.003	%	< 0.003	Acceptable	
CBN	<LOQ	0.003	%	< 0.003	Acceptable	
exo-THC	<LOQ	0.003	%	< 0.003	Acceptable	
d9THC	<LOQ	0.003	%	< 0.003	Acceptable	
d8THC	<LOQ	0.003	%	< 0.003	Acceptable	
CBL	<LOQ	0.003	%	< 0.003	Acceptable	
d10THC	<LOQ	0.003	%	< 0.003	Acceptable	
CBG	<LOQ	0.003	%	< 0.003	Acceptable	
THCA	<LOQ	0.003	%	< 0.003	Acceptable	
CBCA	<LOQ	0.003	%	< 0.003	Acceptable	
CBLA	<LOQ	0.003	%	< 0.003	Acceptable	
CBT	<LOQ	0.003	%	< 0.003	Acceptable	

Abbreviations

ND - None Detected at or above MRL
RPD - Relative Percent Difference
LOQ - Limit of Quantitation

Units of Measure:

% - Percent



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Revision 1 Document D 7148
 Legacy D Worksheet Validated 04/20/2021

Laboratory Quality Control Results

JAOAC2015 V986		Batch ID: 2209379						
Sample Duplicate		Sample ID: 22-0132980001						
Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Evaluation	Notes
CBDVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBE	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBDA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBGA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBG	0.0371	0.0366	0.003	%	1.19	< 20	Acceptable	
CBD	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d8THCV	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
THCVA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBN	0.0110	0.0110	0.003	%	0.635	< 20	Acceptable	
exo-THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d9THC	0.899	0.891	0.003	%	0.950	< 20	Acceptable	
d8THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBL	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
d10THC	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBC	0.0362	0.0358	0.003	%	1.01	< 20	Acceptable	
THCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBCA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBLA	<LOQ	<LOQ	0.003	%	NA	< 20	Acceptable	
CBT	0.0058	0.0059	0.003	%	0.882	< 20	Acceptable	

Abbreviations

ND - None Detected at or above MRL
 RPD - Relative Percent Difference
 LOQ - Limit of Quantitation

Units of Measure:



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Rev s o 3 Docume D 3 20
 Legacy D C L C2 Wo ks ee Va da ed 0/30/2020

Laboratory Pesticide Quality Control Results

AOAC2007.1 &EN 15662		Units: mg/Kg			Batch ID 2209390			
Method Bank	Laboratory Control Sample							
Analyte	Blank Result	Blank Limits	Notes	LCS Result	LCS Spke	LCS % Re	Limits	Notes
Abamectin	0.000	< 0.250		0.870	1.000	87.0	50.0 150	
Acephate	0.000	< 0.250		0.938	1.000	93.8	60.0 120	
Acequinocyl	0.000	< 1.000		3.422	4.000	85.5	40.0 160	
Acetamiprid	0.000	< 0.100		0.379	0.400	94.8	60.0 120	
Aldicarb	0.000	< 0.200		0.783	0.800	97.8	60.0 120	
Azoxystrobin	0.000	< 0.100		0.329	0.400	82.2	60.0 120	
Bifenazate	0.000	< 0.100		0.358	0.400	89.6	60.0 120	
Bifenthrin	0.000	< 0.100		0.356	0.400	88.9	50.0 150	
Boscalid	0.000	< 0.200		0.663	0.800	82.9	60.0 120	
Carbaryl	0.000	< 0.100		0.373	0.400	93.1	60.0 120	
Carbofuran	0.000	< 0.100		0.382	0.400	95.6	60.0 120	
Chlorantraniliprole	0.000	< 0.100		0.343	0.400	85.9	60.0 120	
Chlorfenapyr	0.000	< 0.500		1.725	2.000	86.2	60.0 120	
Chlorpyrifos	0.000	< 0.100		0.346	0.400	86.6	60.0 120	
Clofentazine	0.000	< 0.100		0.117	0.400	29.2	60.0 120	Q6
Cyfluthrin	0.000	< 0.500		1.748	2.000	87.4	50.0 150	
Cypermethrin	0.000	< 0.500		1.768	2.000	88.4	50.0 150	
Daminozide	0.000	< 0.500		0.590	2.000	29.5	60.0 120	Q6
Diazinon	0.000	< 0.100		0.357	0.400	89.2	60.0 120	
Dichlorvos	0.000	< 0.500		2.028	2.000	101.4	60.0 120	
Dimethoate	0.000	< 0.100		0.375	0.400	93.8	60.0 120	
Ethoprophos	0.000	< 0.100		0.368	0.400	92.1	60.0 120	
Etofenprox	0.000	< 0.200		0.710	0.800	88.8	50.0 150	
Etoxazole	0.000	< 0.100		0.366	0.400	91.4	60.0 120	
Fenoxycarb	0.000	< 0.100		0.348	0.400	87.1	60.0 120	
Fenpyroximate	0.000	< 0.200		0.699	0.800	87.4	60.0 120	
Fipronil	0.000	< 0.200		0.675	0.800	84.3	60.0 120	
Fonicamid	0.000	< 0.250		0.946	1.000	94.6	60.0 120	
Fludioxonil	0.000	< 0.200		0.682	0.800	85.2	50.0 150	
Hexythiazox	0.000	< 0.250		0.869	1.000	86.9	60.0 120	
Imazalil	0.000	< 0.100		0.347	0.400	86.7	60.0 120	
Imidacloprid	0.000	< 0.200		0.731	0.800	91.3	60.0 120	
Kresoxim methyl	0.000	< 0.200		0.684	0.800	85.5	60.0 120	
Malathion	0.000	< 0.100		0.357	0.400	89.1	60.0 120	
Metlaxyl	0.000	< 0.100		0.361	0.400	90.3	60.0 120	
Methiocarb	0.000	< 0.100		0.364	0.400	90.9	60.0 120	
Methomyl	0.000	< 0.200		0.791	0.800	98.9	60.0 120	
MGK 264	0.000	< 0.100		0.346	0.400	86.5	50.0 150	
Myclobutanil	0.000	< 0.100		0.358	0.400	89.4	60.0 120	
Naled	0.000	< 0.250		0.861	1.000	86.1	50.0 150	
Oxamyl	0.000	< 0.500		1.834	2.000	91.7	60.0 120	
Paclbutrazole	0.000	< 0.200		0.720	0.800	90.0	60.0 120	
Parathion Methyl	0.000	< 0.200		0.777	0.800	97.1	50.0 150	
Permethrin	0.000	< 0.100		0.351	0.400	87.9	50.0 150	
Phosmet	0.000	< 0.100		0.349	0.400	87.3	50.0 150	
Piperonyl butoxide	0.000	< 0.500		1.698	2.000	84.9	60.0 120	
Prallethrin	0.000	< 0.100		0.363	0.400	90.8	60.0 120	
Propiconazole	0.000	< 0.200		0.689	0.800	86.1	60.0 120	
Propoxur	0.000	< 0.100		0.378	0.400	94.5	60.0 120	
Pyrethrin (Summe)	0.000	< 0.100		0.360	0.413	87.1	60.0 120	
Pyridaben	0.000	< 0.100		0.356	0.400	89.1	50.0 150	
Spirosad	0.000	< 0.100		0.313	0.388	80.6	50.0 150	
Spiromesifen	0.000	< 0.100		0.375	0.400	93.7	60.0 120	
Spirotetramat	0.000	< 0.100		0.339	0.400	84.8	60.0 120	
Spiroxamine	0.000	< 0.200		0.675	0.800	84.4	60.0 120	
ebuconazole	0.000	< 0.200		0.697	0.800	87.1	60.0 120	
hiacloprid	0.000	< 0.100		0.363	0.400	90.8	60.0 120	
hiamethoxam	0.000	< 0.100		0.373	0.400	93.2	60.0 120	
rifloxystrobin	0.000	< 0.100		0.333	0.400	83.4	60.0 120	



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794



Report Number: 22-013348/D004.R000
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 ORELAP#: OR100028
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 Received: 10/31/22 15:17

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Laboratory Pesticide Quality Control Results

AOAC2007.1 & EN 15662											Units: mg/Kg		Batch ID 2209390	
Matrix Spike/Matrix Spike Duplicate Recoveries					Sample ID: 220132310002									
Analyte	Result	MS Res	MSD Res	Spike	RFD%	Limit	MS % Re	MSD % Re	Limits	Notes				
Abamectin	0.000	0.850	0.820	1.000	3.5%	< 30	85.0%	82.0%	50 150					
Acephate	0.000	1.069	1.010	1.000	5.7%	< 30	106.9%	101.0%	50 150					
Acetaminophen	0.233	2.476	2.405	4.000	3.2%	< 30	56.1%	54.3%	50 150					
Acetamiprid	0.000	0.515	0.498	0.400	3.4%	< 30	128.8%	124.5%	50 150					
Aldicarb	0.000	1.017	0.977	0.800	4.1%	< 30	127.1%	122.1%	50 150					
Azoxystrobin	0.000	0.412	0.381	0.400	7.9%	< 30	103.1%	95.3%	50 150					
Bifenazate	0.000	0.392	0.374	0.400	4.7%	< 30	98.1%	93.6%	50 150					
Bifenthrin	0.000	0.000	0.000	0.400	NA	< 30	0.0%	0.0%	50 150	R1, Q				
Boscalid	0.000	0.634	0.623	0.800	1.8%	< 30	79.3%	77.9%	50 150					
Carbaryl	0.000	0.485	0.466	0.400	3.9%	< 30	121.3%	116.6%	50 150					
Carbofuran	0.000	0.551	0.554	0.400	0.6%	< 30	137.8%	138.6%	50 150					
Chlorantraniliprole	0.000	0.384	0.354	0.400	8.3%	< 30	96.1%	88.4%	50 150					
Chlorfenapyr	0.000	1.890	1.832	2.000	3.1%	< 30	94.5%	91.6%	50 150					
Chlorpyrifos	0.000	0.374	0.370	0.400	1.0%	< 30	93.5%	92.6%	50 150					
Clofentezine	0.000	0.076	0.070	0.400	8.4%	< 30	19.1%	17.6%	50 150	Q				
Cyfluthrin	0.000	1.295	1.215	2.000	6.3%	< 30	64.7%	60.8%	30 150					
Cypermethrin	0.000	1.431	1.353	2.000	5.6%	< 30	71.6%	67.7%	50 150					
Daminozide	0.000	1.126	1.066	2.000	5.5%	< 30	56.3%	53.3%	30 150					
Diazinon	0.000	0.355	0.339	0.400	4.6%	< 30	88.7%	84.7%	50 150					
Dichlorvos	0.000	2.206	2.149	2.000	2.6%	< 30	110.3%	107.4%	50 150					
Dimethoate	0.000	0.428	0.405	0.400	5.5%	< 30	106.9%	101.2%	50 150					
Ethoprophos	0.000	0.394	0.359	0.400	9.2%	< 30	98.4%	89.7%	50 150					
Etofenprox	0.000	0.532	0.517	0.800	2.9%	< 30	66.5%	64.6%	50 150					
Etoxazole	0.000	0.367	0.349	0.400	5.1%	< 30	91.8%	87.2%	50 150					
Fenoxycarb	0.000	0.351	0.342	0.400	2.7%	< 30	87.7%	85.4%	50 150					
Fenpyroximate	0.000	0.540	0.530	0.800	1.9%	< 30	67.5%	66.2%	50 150					
Fipronil	0.000	0.433	0.424	0.800	2.2%	< 30	54.1%	53.0%	50 150					
Fonicamid	0.000	0.811	0.778	1.000	4.2%	< 30	81.1%	77.8%	50 150					
Fludioxonil	0.000	0.728	0.677	0.800	7.3%	< 30	91.0%	84.6%	50 150					
Hexythiazox	0.000	0.896	0.878	1.000	2.0%	< 30	89.6%	87.8%	50 150					
Imazalil	0.000	0.431	0.412	0.400	4.5%	< 30	107.8%	103.1%	50 150					
Imidacloprid	0.000	0.749	0.716	0.800	4.5%	< 30	93.7%	89.5%	50 150					
Kresoxim methyl	0.000	0.710	0.671	0.800	5.6%	< 30	88.8%	83.9%	50 150					
Malathion	0.000	0.405	0.383	0.400	5.5%	< 30	101.3%	95.8%	50 150					
Metaxalyl	0.000	0.413	0.396	0.400	4.0%	< 30	103.1%	99.1%	50 150					
Methiocarb	0.000	0.397	0.386	0.400	2.9%	< 30	99.3%	96.5%	50 150					
Methomyl	0.000	0.807	0.664	0.800	19.4%	< 30	100.9%	83.1%	50 150					
MGK 264	0.000	0.349	0.339	0.400	2.8%	< 30	87.1%	84.7%	50 150					
Myclobutanil	0.000	0.366	0.360	0.400	1.5%	< 30	91.4%	90.1%	50 150					
Naled	0.000	1.027	0.981	1.000	4.6%	< 30	102.7%	98.1%	50 150					
Oxamyl	0.000	1.884	1.749	2.000	7.4%	< 30	94.2%	87.4%	50 150					
Paclobutrazole	0.000	0.736	0.713	0.800	3.1%	< 30	91.9%	89.1%	50 150					
Parathion Methyl	0.000	0.932	0.888	0.800	4.8%	< 30	116.5%	111.0%	30 150					
Permethrin	0.000	0.256	0.256	0.400	0.2%	< 30	63.9%	64.0%	50 150					
Phosmet	0.000	0.369	0.347	0.400	6.2%	< 30	92.3%	86.7%	50 150					
Piperonyl butoxide	0.000	1.793	1.755	2.000	2.1%	< 30	89.6%	87.8%	50 150					
Prallethrin	0.000	0.358	0.361	0.400	0.7%	< 30	89.6%	90.2%	50 150					
Propiconazole	0.000	0.618	0.607	0.800	1.9%	< 30	77.3%	75.9%	50 150					
Propoxur	0.000	0.522	0.499	0.400	4.4%	< 30	130.5%	124.9%	50 150					
Pyrethrin (Summe)	0.000	0.249	0.239	0.413	4.1%	< 30	60.3%	57.8%	50 150					
Pyridaben	0.000	0.274	0.269	0.400	1.8%	< 30	68.6%	67.4%	50 150					
Spinosad	0.000	0.330	0.317	0.388	3.8%	< 30	84.9%	81.8%	50 150					
Spiromesifen	0.000	0.355	0.346	0.400	2.4%	< 30	88.7%	86.6%	50 150					
Spirotetramat	0.000	0.378	0.372	0.400	1.7%	< 30	94.6%	93.0%	50 150					
Spiroxamine	0.000	0.786	0.764	0.800	2.9%	< 30	98.3%	95.5%	50 150					
ebuconazole	0.000	0.633	0.613	0.800	3.1%	< 30	79.1%	76.7%	50 150					
hiacloprid	0.000	0.527	0.509	0.400	3.4%	< 30	131.7%	127.3%	50 150					
hiamethoxam	0.000	0.390	0.365	0.400	6.5%	< 30	97.4%	91.3%	50 150					
rifloxystrobin	0.000	0.345	0.333	0.400	3.6%	< 30	86.2%	83.1%	50 150					



12423 NE Whitaker Way
 Portland, OR 97230
 503-254-1794

Report Number: 22-013348/D004.R000
Report Date: 11/07/2022
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Received: 10/31/22 15:17



Revision 2 Document D 7087
 Legacy D CFL-E33Effective

Laboratory Quality Control Results

Residual Solvents				Batch ID: 2209454					
Method Blank				Laboratory Control Sample					
Analyte	Result	LOQ	Notes	Result	Spike	Units	% Rec	Limits	Notes
Propane	ND	< 200		532	572	µg/g	93.0	60	120
Isobutane	ND	< 200		664	731	µg/g	90.8	60	120
Butane	ND	< 200		641	731	µg/g	87.7	60	120
2,2 Dimethylpropane	ND	< 200		1070	936	µg/g	114.3	60	120
Methanol	ND	< 200		1560	1650	µg/g	94.5	60	120
Ethylene Oxide	ND	< 30		52.2	56.2	µg/g	92.9	60	120
2 Methylbutane	ND	< 200		1380	1650	µg/g	83.6	60	120
Pentane	ND	< 200		1390	1650	µg/g	84.2	60	120
Ethanol	ND	< 200		1490	1660	µg/g	89.8	70	130
Ethyl Ether	ND	< 200		1410	1630	µg/g	86.5	60	120
2,2 Dimethylbutane	ND	< 30		158	189	µg/g	83.6	60	120
Acetone	ND	< 200		1470	1650	µg/g	89.1	60	120
2 Propanol	ND	< 200		1620	1650	µg/g	98.2	60	120
Acetonitrile	ND	< 100		503	504	µg/g	99.8	60	120
2,3 Dimethylbutane	ND	< 30		152	174	µg/g	87.4	60	120
Dichloromethane	ND	< 60		464	521	µg/g	89.1	60	120
2 Methylpentane	ND	< 30		162	187	µg/g	86.6	60	120
3 Methylpentane	ND	< 30		164	188	µg/g	87.2	60	120
Hexane	ND	< 30		164	182	µg/g	90.1	60	120
Ethyl acetate	ND	< 200		1500	1630	µg/g	92.0	60	120
2 Butanol	ND	< 200		1480	1630	µg/g	90.8	60	120
tetrahydrofuran	ND	< 100		448	506	µg/g	88.5	60	120
Cyclohexane	ND	< 200		1440	1640	µg/g	87.8	60	120
Benzene	ND	< 1		4.26	4.93	µg/g	86.4	60	120
Isopropyl Acetate	ND	< 200		1490	1640	µg/g	90.9	60	120
Heptane	ND	< 200		1410	1630	µg/g	86.5	60	120
1,4 Dioxane	ND	< 100		430	493	µg/g	87.2	60	120
1,4 Dioxane	ND	< 100		430	493	µg/g	87.2	60	120
2 Ethoxyethanol	ND	< 30		158	171	µg/g	92.4	60	120
Ethylene Glycol	ND	< 200		406	494	µg/g	82.2	60	120
oluene	ND	< 100		431	506	µg/g	85.2	60	120
Ethylbenzene	ND	< 200		865	996	µg/g	86.8	60	120
m,p Xylene	ND	< 200		885	1010	µg/g	87.6	60	120
o Xylene	ND	< 200		835	979	µg/g	85.3	60	120
Cumene	ND	< 30		156	188	µg/g	83.0	60	120



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Revision 2 Document D 7087
 Legacy D CFL-E33Effective

QC - Sample Duplicate **Sample ID: 22-012372-0003**

Analyte	Result	Org. Result	LOQ	Units	RPD	Limits	Accept/Fail	Notes
Propane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Isobutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Butane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2 Dimethylpropane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Methanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethylene Oxide	ND	ND	30	µg/g	0.0	< 20	Acceptable	
2 Methylbutane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Pentane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Ethyl Ether	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2,2 Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Acetone	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2 Propanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Acetonitrile	ND	ND	100	µg/g	0.0	< 20	Acceptable	
2,3 Dimethylbutane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Dichloromethane	ND	ND	60	µg/g	0.0	< 20	Acceptable	
2 Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
3 Methylpentane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Hexane	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Ethyl acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
2 Butanol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
etrahydrofuran	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Cyclohexane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Benzene	ND	ND	1	µg/g	0.0	< 20	Acceptable	
Isopropyl Acetate	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Heptane	ND	ND	200	µg/g	0.0	< 20	Acceptable	
1,4 Dioxane	ND	ND	100	µg/g	0.0	< 20	Acceptable	
2 Ethoxyethanol	ND	ND	30	µg/g	0.0	< 20	Acceptable	
Ethylene Glycol	ND	ND	200	µg/g	0.0	< 20	Acceptable	
oluene	ND	ND	100	µg/g	0.0	< 20	Acceptable	
Ethylbenzene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
m,p Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
o Xylene	ND	ND	200	µg/g	0.0	< 20	Acceptable	
Cumene	ND	ND	30	µg/g	0.0	< 20	Acceptable	

Abbreviations

ND None Detected at or above MRL
 RPD Relative Percent Difference
 LOQ Limit of Quantitation

Units of Measure:

µg/g Microgram per gram or ppm



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Explanation of QC Flag Comments:

Code	Explanation
Q	Matrix interferences affecting spike or surrogate recoveries.
Q1	Quality control result biased high. Only non-detect samples reported.
Q2	Quality control outside QC limits. Data considered estimate.
Q3	Sample concentration greater than four times the amount spiked.
Q4	Non-homogenous sample matrix, affecting RPD result and/or % recoveries.
Q5	Spike results above calibration curve.
Q6	Quality control outside QC limits. Data acceptable based on remaining QC.
R	Relative percent difference (RPD) outside control limit.
R1	RPD non-calculable, as sample or duplicate results are less than five times the LOQ.
R2	Sample replicates RPD non-calculable, as only one replicate is within the analytical range.
LOQ1	Quantitation level raised due to low sample volume and/or dilution.
LOQ2	Quantitation level raised due to matrix interference.
B	Analyte detected in method blank, but not in associated samples.
B1	The sample concentration is greater than 5 times the blank concentration.
B2	The sample concentration is less than 5 times the blank concentration.