

Covance Food Solutions is now Eurofins Food Integrity and Innovation

Certificate of Analysis

Bluebird Botanicals

 500 S Arthur Ave, Ste 300
 Boulder Colorado 80027 United States

Sample Name:	CLX 0337	Eurofins Sample:	7762990
Project ID	BLUEBIR_BO-20181011-0128	Receipt Date	12-Oct-2018
PO Number	CVD	Receipt Condition	Ambient temperature
Sample Serving Size		Login Date	11-Oct-2018
		Online Order	12704-1082385E

Analysis
Result
Elements by ICP Mass Spectrometry

Arsenic	<10.0 ppb
Cadmium	<5.00 ppb
Lead	25.1 ppb
Mercury	<5.00 ppb

Mycotoxins in Raw Materials

Aflatoxin B1	<0.500 ppb
Aflatoxin B2	<0.500 ppb
Aflatoxin G1	<0.500 ppb
Aflatoxin G2	<0.500 ppb
Aflatoxin M1	<0.500 ppb
Aflatoxin M2	<0.500 ppb
Deoxynivalenol	<100 ppb
T-2 Toxin	<10.0 ppb
HT-2 Toxin	<100 ppb
Fumonisin B1	<25.0 ppb
Fumonisin B2	<25.0 ppb
Ochratoxin A	<1.00 ppb
Zearalenone	<30.0 ppb

Multi-Residue Analysis for hemp products - 18 compounds

Matrix Type - To Determine Limit of Quantification (LOQ)	High-Fat Food Matrices
Abamectin	<50 ppb
Azoxystrobin	<50 ppb
Bifenazate	<50 ppb
Bifenthrin	<50 ppb
Cyfluthrin	<50 ppb
Dichlorvos	<50 ppb
Etoxazole	<50 ppb
Fenoxycarb	<50 ppb
Imazalil	<50 ppb
Imidacloprid	<50 ppb
Myclobutanil	<50 ppb
Paclobutrazol	<50 ppb
Piperonyl butoxide	<50 ppb
Pyrethrum (total)	<500 ppb
Spinosad (spinosyns A and D)	<50 ppb

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Analysis	Result
Multi-Residue Analysis for hemp products - 18 compounds	
Spiromesifen	<50 ppb
Spirotetramat	<50 ppb
Trifloxystrobin	<50 ppb

Method References	Testing Location
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Elements by ICP Mass Spectrometry (ICP_MS_S)	Food Integrity Innovation-Madison
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Official Methods of Analysis, Method 2011.19 and 993.14, AOAC INTERNATIONAL, (Modified).
 Pequette, 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).

Multi-Residue Analysis for hemp products - 18 compounds (PEST_HEMP)	Food Integ. Innovation-Greenfield
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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
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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).

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Testing Location(s)

Released on Behalf of Eurofins by

Food Integ. Innovation-Greenfield

Eurofins Food Chemistry Testing US, Inc.
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Food Integrity Innovation-Madison

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Eurofins Food Integrity and Innovation accepts all liability for work conducted as of 01 Aug 2018.

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