eurofins | Food Integrity & Innovation

Report Number: 2444827-0
Report Date: 30-Mar-2019
Report Status: Final
Supercedes :4904-0 2443507-0

Certificate of Analysis

Oriveda BV

Sample Name:	**8 Maitake Grifolan Extract (Grifola Frondosa)**	**Eurofins Sample:**	**8244907**
Project ID	ORIVED_HAR-20190314-0001	**Receipt Date**	14-Mar-2019
PO Number	CVD	**Receipt Condition**	Ambient temperature
Lot Number	2019	**Login Date**	14-Mar-2019
Sample Serving Size		**Online Order**	20

Analysis	Result
Beta Glucan	
Beta Glucan	41.1 %
Calculated Sample Weight	
Entity Weight	0.4486 g
Entity Fill Weight	0.3704 g
Total Polyphenols	
Total Polyphenols (Gallic Acid Equivalents)	1.36 %

Method References	Testing Location
Beta Glucan (MISC_YBGL)	**Food Integrity Innovation-Madison**
Megazyme Kit K-YBGL	
Calculated Sample Weight (PREP)	**Food Integrity Innovation-Madison**
Total Polyphenols (TOTP_S)	**Food Integrity Innovation-Madison**
Methods of Enzymology, Volume 299, Oxidants and Antioxidants Part A, Pages 152-178, 1999 (modified).	

Testing Location(s)	Released on Behalf of Eurofins by
Food Integrity Innovation-Madison	**Edward Ladwig - Director**

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

Eurofins Food Integrity and Innovation accepts all liability for work conducted as of 01 Aug 2018.
These results apply only to the items tested. This certificate of analysis shall not be reproduced, except in its entirety, without the written approval of Eurofins.

Data based on a sample analysis by CWC-Labs, USA, 04-2019

Maitake GRIFOLAN

oriveda

2019	levels (ppb)	levels in mg/g	**levels per serving (mcg / 800 mg)**
HEAVY METALS *			
Lead (Pb)	948.145	0.000948145	0.7585
Arsenic (As)	421.016	0.000421016	0.3368
Cadmium (Cd)	775.5	0.0007755	0.6204
Mercury (Hg)	0	0	0.0000
COMPOUNDS			
Manganese (Mn)	14726.032	0.014726032	13.2534
Zinc (Zn)	56747.624	0.056747624	51.0729
Magnesium (Mg)	1417440.477	1.417440477	1275.6964
Aluminum (Al)	64161.031	0.064161031	57.7449
Potassium (K)	35778936.385	35.778936385	32201.0427
Iron (Fe)	112199.535	0.112199535	100.9796
Copper (Cu)	35493.976	0.035493976	31.9446
Silver (Ag)	2132.318	0.002132318	1.9191
Molybdenium (Mo)	500.941	0.000500941	0.4508
Selenium (Se)	145.746	0.000145746	0.1312
Nickel (Ni)	297.789	0.000297789	0.2680
Cromium (Cr)	667.473	0.000667473	0.6007
Vanadium (V)	195.781	0.000195781	0.1762
Caesium (Cs-133)	195.04	0.00019504	0.1755
Strontium (Sr-88)	3535.68	0.00353568	3.1821
Uranium (U)	22.687	2.2687E-05	0.0204

ESSENTIAL NUTRIENTS with a recommended daily value (FDA)	**nutrient levels per serving (mcg / 900 mg)**	**FDA, recommended daily value (RDV in mcg), 4 years and older**	**percentage of RDV in this extract, per nutrient**
Manganese (Mn)	13.2534	2000	0.66%
Zinc (Zn)	51.0729	15000	0.34%
Magnesium (Mg)	1275.6964	400000	0.32%
Potassium (K)	32201.0427	3500000	0.92%
Iron (Fe)	100.9796	18000	0.56%
Copper (Cu)	31.9446	2000	1.60%
Molybdenium (Mo)	0.4508	75	0.60%
Selenium (Se)	0.1312	70	0.19%
Cromium (Cr)	0.6007	120	0.50%

ppd : parts per billion
mg : milligram; 1/1,000th of a gram
mcg : microgram: 1/1,000,000 of a gram
mcg/g : micrograms per gram
mg/g : milligrams per gram
serving: the recommended average daily dosage

---

* There is a great variation in what are considered safe levels of heavy metals in food, worldwide. Ideally they should take into account both the intake and the body weight of a person. More information: https://is.gd/TLg3ha

Below are the official EU and World Health Organisation / Joint Expert Committee on Food Additives (WHO / JECFA) guidelines.

Arsenic: (Adult, 70 kgs: 150 mcg = daily limit)
Cadmium: (Adult, 70 kgs: 70 mcg daily = daily limit)
Lead: (Adult, 70 kgs: 250 mcg daily = daily limit)
Mercury: (Adult, 70 kgs: 16 mcg daily = daily limit)

Metals Analysis Report

Operator: E.C.

File Name	048SMPL.d
File Path	D:\Data\2019\2019-04-15 samples 5726 and up.b
Acq Time	4/15/2019 1:29:50 PM
Sample Name	C1817
Sample Type	Sample
Comment	ORIVeDA Maitake Grifolan (Grifola frondosa) extract 2019-04-10-20 Lot#VIDA44Y9POB819RI
Prep Dilution	121.4772
Auto Dilution	1.0000
Total Dilution	121.4772
Acq Mode	Spectrum
Cal Title	---
Cal Type	External Calibration
Last Calib	04/15/2019 14:42:52
Bkg File	003_BKG.d
Bkg Mode	Count Subtraction except for ISTD
FQ BlankFile	018QBLK.d
VIS Fit	Linear

Metals Analysis Report

CWC Labs is an ISO 17025 accredited laboratory. See CWClabs.com for accreditation details.

FullQuant Table

Element	Mass	Conc.	Units	RSD(%)	Det.
Mg	24	1417440.477	ppb	1.2	Analog
Al	27	64161.031	ppb	2.1	Pulse
K	39	35778936.385	ppb	0.8	Analog
V	51	195.781	ppb	1.2	Pulse
Cr	52	667.473	ppb	0.3	Pulse
Mn	55	14726.032	ppb	0.9	Pulse
Fe	56	112199.535	ppb	0.6	Analog
Ni	60	297.789	ppb	2.2	Pulse
Cu	63	35493.976	ppb	1.6	Analog
Zn	66	56747.624	ppb	1.1	Pulse
As	75	421.016	ppb	3.0	Pulse
Se	78	145.746	ppb	17.8	Pulse
Sr	88	3535.680	ppb	2.5	Pulse
Mo	95	500.941	ppb	3.0	Pulse
Ag	107	2132.318	ppb	2.1	Pulse
Cd	111	378.286	ppb	1.5	Pulse
Cd	114	397.214	ppb	1.2	Pulse
Cs	133	195.040	ppb	2.1	Pulse
Hg	200	<0.000	ppb	N/A	Pulse
Hg	201	<0.000	ppb	N/A	Pulse
Hg	202	<0.000	ppb	N/A	Pulse
Pb	206	314.536	ppb	2.3	Pulse
Pb	207	317.723	ppb	0.9	Pulse
Pb	208	315.886	ppb	1.4	Pulse
U	238	22.687	ppb	4.5	Pulse

ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
He	Sc	45	513935.17	2.4	83.4	Pulse	0.3000	3
He	Ge	72	57002.87	2.8	80.2	Pulse	0.3000	3
He	In	115	514079.10	2.7	78.4	Pulse	0.3000	3
He	Te	125	75278.52	1.5	87.1	Pulse	0.3000	3
He	Tb	159	1514929.45	3.3	82.6	Analog	0.2000	3
He	Bi	209	877527.49	2.3	74.8	Pulse	0.2000	3