Columbia LABORATORIES
A Tentamus Company

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

Report Number: 22-006544/D002.R002
Report Date: 06/21/2022
Purchase Order: 0010
Received: 06/06/22 02:49 PM

Project Number: 1
Project Name: [redacted] 6/22

This is an amended version of report# 22-006544/D002.R001.
Reason: Corrected yeast result, sample 1

Customer: Mushie LLC
7455 36th Court
Vero Beach Florida 32967
United States of America (USA)

Sample ID: Complex (mushie DEFEND)
Sample Matrix: Powder
Laboratory ID: 22-006544-0004-00
Temp: 22.4 °C

Sample Results

Metals

Heavy Metals Profile A

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Arsenic	0.337	mg/kg	0.0192	06/09/22	AOAC 2013.06 (mod.)[1]	
Cadmium	0.311	mg/kg	0.0192	06/09/22	AOAC 2013.06 (mod.)[1]	
Lead	0.426	mg/kg	0.0192	06/09/22	AOAC 2013.06 (mod.)[1]	
Mercury	0.0102	mg/kg	0.00958	06/09/22	AOAC 2013.06 (mod.)[1]	

1) trace metals in food by Inductively Coupled Mass Spectrometry

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Staphylococcus aureus	< LOQ	cfu/g	100	06/08/22	AOAC 2003.07	

Micro Profile D, (M1010)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Aerobic Plate Count	< LOQ	cfu/g	100	06/09/22	AOAC 990.12 (Petrifilm)	
E.coli	< LOQ	cfu/g	100	06/09/22	AOAC 991.14 (Petrifilm)	
Total Coliforms	< LOQ	cfu/g	100	06/09/22	AOAC 991.14 (Petrifilm)	
Mold (RAPID Petrifilm)	< LOQ	cfu/g	100	06/10/22	AOAC 2014.05 (RAPID)	
Yeast (RAPID Petrifilm)	< LOQ	cfu/g	100	06/10/22	AOAC 2014.05 (RAPID)	

Nutrition

Beta-Glucan Profile (Yeast & Mushroom)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Alpha-glucan†	5.5	%	1.0	06/13/22	Novel Method[2]	
Beta-glucan†	25.8	%	1.0	06/13/22	Novel Method[2]	
Total-Glucan†	31.3	%	1.0	06/13/22	Novel Method[2]	

2) Megazyme - 1,3:1,6 Beta-Glucan

Columbia LABORATORIES
A Tentamus Company

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

Report Number: 22-006544/D002.R002
Report Date: 06/21/2022
Purchase Order: 0010
Received: 06/06/22 02:49 PM

Project Number: 1
Project Name: [redacted] 6/22

This is an amended version of report# 22-006544/D002.R001.
Reason: Corrected yeast result, sample 1

Customer: Mushie LLC
7455 36th Court
Vero Beach Florida 32967
United States of America (USA)

Sample ID: Reishi (mushie UNWIND)
Sample Matrix: Powder
Laboratory ID: 22-006544-0003-00
Temp: 22.4 °C

Sample Results

Metals

Heavy Metals Profile A

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Arsenic	0.731	mg/kg	0.0167	06/09/22	AOAC 2013.06 (mod.)[1]	
Cadmium	0.749	mg/kg	0.0167	06/09/22	AOAC 2013.06 (mod.)[1]	
Lead	0.129	mg/kg	0.0167	06/09/22	AOAC 2013.06 (mod.)[1]	
Mercury	0.0177	mg/kg	0.00837	06/09/22	AOAC 2013.06 (mod.)[1]	

1) trace metals in food by Inductively Coupled Mass Spectrometry

Microbiology

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Staphylococcus aureus	< LOQ	cfu/g	100	06/08/22	AOAC 2003.07	

Micro Profile D, (M1010)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Aerobic Plate Count	< LOQ	cfu/g	100	06/09/22	AOAC 990.12 (Petrifilm)	
E.coli	< LOQ	cfu/g	100	06/09/22	AOAC 991.14 (Petrifilm)	
Total Coliforms	< LOQ	cfu/g	100	06/09/22	AOAC 991.14 (Petrifilm)	
Mold (RAPID Petrifilm)	< LOQ	cfu/g	100	06/10/22	AOAC 2014.05 (RAPID)	
Yeast (RAPID Petrifilm)	< LOQ	cfu/g	100	06/10/22	AOAC 2014.05 (RAPID)	

Nutrition

Beta-Glucan Profile (Yeast & Mushroom)

Analyte	Result	Units	LOQ	Analyzed	Method	Notes
Alpha-glucan†	2.1	%	1.0	06/13/22	Novel Method[2]	
Beta-glucan†	18.3	%	1.0	06/13/22	Novel Method[2]	
Total-Glucan†	20.4	%	1.0	06/13/22	Novel Method[2]	

2) Megazyme - 1,3:1,6 Beta-Glucan

Columbia LABORATORIES
A Tentamus Company

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

Report Number:	22-006544/D002.R002
Report Date:	06/21/2022
Purchase Order:	0010
Received:	06/06/22 02:49 PM
Project Number:	1
Project Name:	[redacted] 6/22

Abbreviations

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.

† = Analyte not ISO accredited.

Units of Measure

cfu/g = Colony forming units per gram
mg/kg = Milligram per kilogram = parts per million (ppm)
% = Percentage of sample

Approved Signatory

Derrick Tanner
General Manager