



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

Report Number: 24-000309/D003.R000
Report Date: 01/22/2024
Purchase Order: andy010823
Received: 01/09/24 12:30 PM



Customer: Lamp Nutra
3133 Tigar Run Ct Ste 104
Carlsbad California 92010
United States of America (USA)

Sample ID: LNK-L46-B1
Sample Matrix: Kratom powder
Laboratory ID: 24-000309-0001
Evidence of Cooling: No
Temp: 18.7 °C

Sample Results

Metals

Kratom Quality & Safety Expanded

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
Arsenic	0.278	mg/kg	0.0158	01/16/24 AOAC 2013.06 (mod.) ^b	1.50	pass	
Cadmium	0.0241	mg/kg	0.0158	01/16/24 AOAC 2013.06 (mod.) ^b	0.500	pass	
Lead	0.687	mg/kg	0.0158	01/16/24 AOAC 2013.06 (mod.) ^b	1.00	pass	
Mercury	0.0212	mg/kg	0.00788	01/16/24 AOAC 2013.06 (mod.) ^b	0.200	pass	
Nickel	2.93	mg/kg	0.0158	01/16/24 AOAC 2013.06 (mod.) ^b	20.0	pass	

Microbiology

Kratom Quality & Safety Expanded

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
Aerobic Plate Count	5,800	cfu/g	100	01/10/24 AOAC 990.12 (Petrifilm) ^b	10,000	pass	
E.coli	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^b	100	pass	
Total Coliforms	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^b	1,000	pass	
Enterobacteriaceae	< LOQ	cfu/g	100	01/11/24 AOAC 2003.01 ^b	1,000	pass	
Mold (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^b	1,000	pass	
Yeast (RAPID Petrifilm)	100	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^b	1,000	pass	
Salmonella spp. by PCR	Negative	/25g	-	01/11/24 AOAC 2020.02 ^b ₁	Negative	pass	

1) GENE-UP® Assay

Mitragynine

Kratom Quality & Safety Expanded

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
7-Hydroxymitragynine	0.0210	%	0.0100	01/12/24 In house method by HPLC-DAD ^b			
Isorhynchophylline	< LOQ	%	0.0500	01/12/24 In house method by HPLC-DAD ^b			
Mitragynine	1.28	%	0.0500	01/12/24 In house method by HPLC-DAD ^b			
Mitraphylline	< LOQ	%	0.0500	01/12/24 In house method by HPLC-DAD ^b			



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Mitragynine

Kratom Quality & Safety Expanded

Analyte	Result	Units	LOQ	Analized Method	Threshold	Pass/Fail	Notes
Paynantheine	0.227	%	0.0500	01/12/24 In house method by HPLC-DAD ^P			
Speciociliatine	0.292	%	0.0500	01/12/24 In house method by HPLC-DAD ^P			
Speciogynine	0.140	%	0.0500	01/12/24 In house method by HPLC-DAD ^P			
Total Alkaloids	1.96	%	-	01/22/24 In house method by HPLC-DAD ^P			



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Customer: Lamp Nutra
 3133 Tigar Run Ct Ste 104
 Carlsbad California 92010
 United States of America (USA)

Sample ID: LNK-L46-B2
Sample Matrix: Kratom powder
Laboratory ID: 24-000309-0002
Evidence of Cooling: No
Temp: 18.7 °C

Sample Results

Microbiology

Micro Profile L

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
Aerobic Plate Count	1,800	cfu/g	100	01/10/24 AOAC 990.12 (Petrifilm) ^P	10,000	pass	
E.coli	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	100	pass	
Total Coliforms	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	1,000	pass	
Staphylococcus aureus	< LOQ	cfu/g	100	01/11/24 AOAC 2003.07 ^P			
Mold (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Yeast (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Listeria spp.	Negative	/25g	-	01/11/24 AOAC 2019.10 ^P ₁			
Salmonella spp. by PCR	Negative	/25g	-	01/11/24 AOAC 2020.02 ^P ₂	Negative	pass	

- 1) GENE-UP[®] Assay
 2) GENE-UP[®] Assay

Mitragynine

Mitragynine + 7-Hydroxymitragynine (S3200)

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
7-Hydroxymitragynine	0.0273	%	0.0100	01/12/24 In house method by HPLC-DAD ^P			
Mitragynine	1.34	%	0.0500	01/12/24 In house method by HPLC-DAD ^P			



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 3133 Tigar Run Ct Ste 104
 Carlsbad California 92010
 United States of America (USA)

Sample ID: LNK-L46-B3
Sample Matrix: Kratom powder
Laboratory ID: 24-000309-0003
Evidence of Cooling: No
Temp: 18.7 °C

Sample Results

Microbiology

Micro Profile L

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
Aerobic Plate Count	9,700	cfu/g	100	01/10/24 AOAC 990.12 (Petrifilm) ^P	10,000	pass	
E.coli	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	100	pass	
Total Coliforms	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	1,000	pass	
Staphylococcus aureus	< LOQ	cfu/g	100	01/11/24 AOAC 2003.07 ^P			
Mold (RAPID Petrifilm)	100	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Yeast (RAPID Petrifilm)	100	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Listeria spp.	Negative	/25g	-	01/11/24 AOAC 2019.10 ^{P1}			
Salmonella spp. by PCR	Negative	/25g	-	01/11/24 AOAC 2020.02 ^{P2}	Negative	pass	

- 1) GENE-UP[®] Assay
 2) GENE-UP[®] Assay

Mitragynine

Mitragynine + 7-Hydroxymitragynine (S3200)

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
7-Hydroxymitragynine	0.0285	%	0.0100	01/12/24 In house method by HPLC-DAD ^P			
Mitragynine	1.37	%	0.0500	01/12/24 In house method by HPLC-DAD ^P			



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 3133 Tigar Run Ct Ste 104
 Carlsbad California 92010
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Sample ID: LNK-L46-B4
Sample Matrix: Kratom powder
Laboratory ID: 24-000309-0004
Evidence of Cooling: No
Temp: 18.7 °C

Sample Results

Microbiology

Micro Profile L

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
Aerobic Plate Count	2,600	cfu/g	100	01/10/24 AOAC 990.12 (Petrifilm) ^P	10,000	pass	
E.coli	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	100	pass	
Total Coliforms	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	1,000	pass	
Staphylococcus aureus	< LOQ	cfu/g	100	01/11/24 AOAC 2003.07 ^P			
Mold (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Yeast (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Listeria spp.	Negative	/25g	-	01/11/24 AOAC 2019.10 ^P ₁			
Salmonella spp. by PCR	Negative	/25g	-	01/11/24 AOAC 2020.02 ^P ₂	Negative	pass	

- 1) GENE-UP[®] Assay
 2) GENE-UP[®] Assay

Mitragynine

Mitragynine + 7-Hydroxymitragynine (S3200)

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
7-Hydroxymitragynine	0.0323	%	0.0100	01/12/24 In house method by HPLC-DAD ^P			
Mitragynine	1.36	%	0.0500	01/12/24 In house method by HPLC-DAD ^P			



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 3133 Tigar Run Ct Ste 104
 Carlsbad California 92010
 United States of America (USA)

Sample ID: LNK-L46-B5
Sample Matrix: Kratom powder
Laboratory ID: 24-000309-0005
Evidence of Cooling: No
Temp: 18.7 °C

Sample Results

Microbiology

Micro Profile L

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
Aerobic Plate Count	2,900	cfu/g	100	01/10/24 AOAC 990.12 (Petrifilm) ^p	10,000	pass	
E.coli	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^p	100	pass	
Total Coliforms	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^p	1,000	pass	
Staphylococcus aureus	< LOQ	cfu/g	100	01/11/24 AOAC 2003.07 ^p			
Mold (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^p	1,000	pass	
Yeast (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^p	1,000	pass	
Listeria spp.	Negative	/10g	-	01/11/24 AOAC 2019.10 ^{p1}			I
Salmonella spp. by PCR	Negative	/25g	-	01/11/24 AOAC 2020.02 ^{p2}	Negative	pass	

- 1) GENE-UP® Assay
 2) GENE-UP® Assay

Mitragynine

Mitragynine + 7-Hydroxymitragynine (S3200)

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
7-Hydroxymitragynine	0.0303	%	0.0100	01/12/24 In house method by HPLC-DAD ^p			
Mitragynine	1.35	%	0.0500	01/12/24 In house method by HPLC-DAD ^p			



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 3133 Tigar Run Ct Ste 104
 Carlsbad California 92010
 United States of America (USA)

Sample ID: LNK-L46-B6
Sample Matrix: Kratom powder
Laboratory ID: 24-000309-0006
Evidence of Cooling: No
Temp: 18.7 °C

Sample Results

Microbiology

Micro Profile L

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
Aerobic Plate Count	3,900	cfu/g	100	01/10/24 AOAC 990.12 (Petrifilm) ^P	10,000	pass	
E.coli	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	100	pass	
Total Coliforms	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	1,000	pass	
Staphylococcus aureus	< LOQ	cfu/g	100	01/11/24 AOAC 2003.07 ^P			
Mold (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Yeast (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Listeria spp.	Negative	/10g	-	01/11/24 AOAC 2019.10 ^{P1}			I
Salmonella spp. by PCR	Negative	/25g	-	01/11/24 AOAC 2020.02 ^{P2}	Negative	pass	

- 1) GENE-UP[®] Assay
 2) GENE-UP[®] Assay

Mitragynine

Mitragynine + 7-Hydroxymitragynine (S3200)

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
7-Hydroxymitragynine	0.0329	%	0.0100	01/12/24 In house method by HPLC-DAD ^P			
Mitragynine	1.33	%	0.0500	01/12/24 In house method by HPLC-DAD ^P			



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Customer: Lamp Nutra
3133 Tigar Run Ct Ste 104
Carlsbad California 92010
United States of America (USA)

Sample ID: LNK-L46-B7
Sample Matrix: Kratom powder
Laboratory ID: 24-000309-0007
Evidence of Cooling: No
Temp: 18.7 °C

Sample Results

Microbiology

Micro Profile L

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
Aerobic Plate Count	1,500	cfu/g	100	01/10/24 AOAC 990.12 (Petrifilm) ^P	10,000	pass	
E.coli	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	100	pass	
Total Coliforms	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	1,000	pass	
Staphylococcus aureus	< LOQ	cfu/g	100	01/11/24 AOAC 2003.07 ^P			
Mold (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Yeast (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Listeria spp.	Negative	/10g	-	01/11/24 AOAC 2019.10 ^P ₁			I
Salmonella spp. by PCR	Negative	/25g	-	01/11/24 AOAC 2020.02 ^P ₂	Negative	pass	

- 1) GENE-UP[®] Assay
2) GENE-UP[®] Assay

Mitragynine

Mitragynine + 7-Hydroxymitragynine (S3200)

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
7-Hydroxymitragynine	0.0321	%	0.0100	01/12/24 In house method by HPLC-DAD ^P			
Mitragynine	1.36	%	0.0500	01/12/24 In house method by HPLC-DAD ^P			



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Customer: Lamp Nutra
 3133 Tigar Run Ct Ste 104
 Carlsbad California 92010
 United States of America (USA)

Sample ID: LNK-L46-B8
Sample Matrix: Kratom powder
Laboratory ID: 24-000309-0008
Evidence of Cooling: No
Temp: 18.7 °C

Sample Results

Microbiology

Micro Profile L

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
Aerobic Plate Count	1,300	cfu/g	100	01/10/24 AOAC 990.12 (Petrifilm) ¹	10,000	pass	
E.coli	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ¹	100	pass	
Total Coliforms	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ¹	1,000	pass	
Staphylococcus aureus	< LOQ	cfu/g	100	01/11/24 AOAC 2003.07 ¹			
Mold (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ¹	1,000	pass	
Yeast (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ¹	1,000	pass	
Listeria spp.	Negative	/10g	-	01/11/24 AOAC 2019.10 ¹ ₁			I
Salmonella spp. by PCR	Negative	/25g	-	01/11/24 AOAC 2020.02 ¹ ₂	Negative	pass	

- 1) GENE-UP[®] Assay
 2) GENE-UP[®] Assay

Mitragynine

Mitragynine + 7-Hydroxymitragynine (S3200)

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
7-Hydroxymitragynine	0.0346	%	0.0100	01/12/24 In house method by HPLC-DAD ¹			
Mitragynine	1.26	%	0.0500	01/12/24 In house method by HPLC-DAD ¹			



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Customer: Lamp Nutra
 3133 Tigar Run Ct Ste 104
 Carlsbad California 92010
 United States of America (USA)

Sample ID: LNK-L46-B9
Sample Matrix: Kratom powder
Laboratory ID: 24-000309-0009
Evidence of Cooling: No
Temp: 18.7 °C

Sample Results

Microbiology

Micro Profile L

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
Aerobic Plate Count	500	cfu/g	100	01/10/24 AOAC 990.12 (Petrifilm) ^P	10,000	pass	
E. coli	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	100	pass	
Total Coliforms	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	1,000	pass	
Staphylococcus aureus	< LOQ	cfu/g	100	01/11/24 AOAC 2003.07 ^P			
Mold (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Yeast (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Listeria spp.	Negative	/10g	-	01/11/24 AOAC 2019.10 ^P ₁			I
Salmonella spp. by PCR	Negative	/10g	-	01/11/24 AOAC 2020.02 ^P ₂	Negative	pass	I

- 1) GENE-UP[®] Assay
- 2) GENE-UP[®] Assay

Mitragynine

Mitragynine + 7-Hydroxymitragynine (S3200)

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
7-Hydroxymitragynine	0.0400	%	0.0100	01/12/24 In house method by HPLC-DAD ^P			
Mitragynine	1.29	%	0.0500	01/12/24 In house method by HPLC-DAD ^P			

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



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Customer: Lamp Nutra
 3133 Tigar Run Ct Ste 104
 Carlsbad California 92010
 United States of America (USA)

Sample ID: LNK-L46-B10
Sample Matrix: Kratom powder
Laboratory ID: 24-000309-0010
Evidence of Cooling: No
Temp: 18.7 °C

Sample Results

Microbiology

Micro Profile L

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
Aerobic Plate Count	2,600	cfu/g	100	01/10/24 AOAC 990.12 (Petrifilm) ^P	10,000	pass	
E.coli	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	100	pass	
Total Coliforms	< LOQ	cfu/g	100	01/12/24 AOAC 991.14 (Petrifilm) ^P	1,000	pass	
Staphylococcus aureus	< LOQ	cfu/g	100	01/11/24 AOAC 2003.07 ^P			
Mold (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Yeast (RAPID Petrifilm)	< LOQ	cfu/g	100	01/13/24 AOAC 2014.05 (RAPID) ^P	1,000	pass	
Listeria spp.	Negative	/25g	-	01/11/24 AOAC 2019.10 ^{P1}			
Salmonella spp. by PCR	Negative	/25g	-	01/11/24 AOAC 2020.02 ^{P2}	Negative	pass	

- 1) GENE-UP[®] Assay
 2) GENE-UP[®] Assay

Mitragynine

Mitragynine + 7-Hydroxymitragynine (S3200)

Analyte	Result	Units	LOQ	Analyzed Method	Threshold	Pass/Fail	Notes
7-Hydroxymitragynine	0.0210	%	0.0100	01/12/24 In house method by HPLC-DAD ^P			
Mitragynine	1.28	%	0.0500	01/12/24 In house method by HPLC-DAD ^P			

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.

Threshold Note: limits based on AHPA Recommended Limits for botanical extracts and products

Glossary of Qualifiers

I: Insufficient sample received to meet method requirements.

^P = ISO/IEC 17025:2017 accredited method.