

# Certificate of Analysis

**Sample Information**

ID: 427185  
 Date Received: 7/15/2021  
 Description: Kratom  
 Lot#: W21GR/H

**Analysis**

Kratom 2A Profile  
 Complete Micro Profile  
 Total Plate Count (High Count)  
 Coliforms  
 E. coli

Staphylococcus aureus

Salmonella

Yeast (High Count)

Mold (High Count)

Heavy Metals

Arsenic (As)

Cadmium (Cd)

Mercury (Hg)

Lead (Pb)

Mitragynine Package

Mitragynine

7-Hydroxy-Mitragynine

	Method	MDL / LOQ	Specification	Results	UOM
	USP, AOAC				
	USP <2021>	1,000	Record Only	None Detected	cfu's/g
	AOAC 991.14	100	Record Only	None Detected	cfu's/g
	USP <2022>	Absent	Record Only	Absent	cfu's/10g
	USP <2022>	Absent	Record Only	Absent	cfu's/10g
	USP <2022>	Absent	Record Only	Absent	cfu's/10g
	USP <2021>	100	Record Only	None Detected	cfu's/g
	USP <2021>	100	Record Only	None Detected	cfu's/g
	ARL ICPMS 8.016				
	ARL ICPMS 8.016	0.001	Record Only	0.311	ppm
	ARL ICPMS 8.016	0.001	Record Only	0.034	ppm
	ARL ICPMS 8.016	0.001	Record Only	0.025	ppm
	ARL ICPMS 8.016	0.001	Record Only	0.614	ppm
	HPLC 2.046				
	HPLC 2.046	0.1	Record Only	1.2	%
	HPLC 2.046	0.04	Record Only	<0.04	%

# Certificate of Analysis

**Sample Information**

ID: 422115  
 Date Received: 6/17/2021  
 Description: Kratom  
 Lot#: W20-4

**Analysis**

Kratom 2A Profile  
 Complete Micro Profile  
 Total Plate Count (High Count)  
 Coliforms  
 E. coli

Staphylococcus aureus  
 Salmonella  
 Yeast (High Count)

Mold (High Count)

Heavy Metals

Arsenic (As)

Cadmium (Cd)

Mercury (Hg)

Lead (Pb)

Mitragynine Package

Mitragynine

7-Hydroxy-Mitragynine

	Method	†MDL / LOQ	Specification	Results	UOM	Lab ID
	USP, AOAC					
Arsenic (As)	USP <2021>	100	Record Only	None Detected	cfu's/g	
Cadmium (Cd)	AOAC 991.14	100	Record Only	None Detected	cfu's/g	
Mercury (Hg)	USP <2022>	Absent	Record Only	Absent	cfu's/10g	
Lead (Pb)	USP <2022>	Absent	Record Only	Absent	cfu's/10g	
Mitragynine Package	USP <2022>	Absent	Record Only	Absent	cfu's/10g	
Mitragynine	USP <2021>	100	Record Only	None detected	cfu's/g	
7-Hydroxy-Mitragynine	USP <2021>	100	Record Only	None detected	cfu's/g	
	ARL ICPMS 8.016					
	ARL ICPMS 8.016	0.001	Record Only	0.455	ppm	
	ARL ICPMS 8.016	0.001	Record Only	0.015	ppm	
	ARL ICPMS 8.016	0.001	Record Only	0.024	ppm	
	ARL ICPMS 8.016	0.001	Record Only	0.573	ppm	
	HPLC 2.046					
	HPLC 2.046	0.1	Record Only	1.1	%	
	HPLC 2.046	0.04	Record Only	<0.04	%	

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 Jul 1, 2021  
 Page 1

†**Method Detection Limit (MDL):** In microbiological testing, this is the minimum level of growth that can be detected with confidence. If a result is reported as "None detected", it means any visible growth was below this limit. **Limit of Quantitation (LOQ):** In analytical chemistry testing, this is the minimum level of the desired analyte that can be quantified with confidence. If a result is reported as less than LOQ, it means any detected amount was too small to report an exact number.

# Certificate of Analysis

Sample Information

ID: 393513  
 Date Received: 1/22/2021  
 Description: White Hulu  
 Lot#: A0292

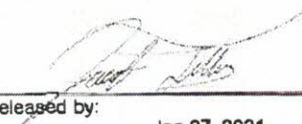
Analysis

	Method	MDL	Specification	Results	UOM	Lab ID
Kratom 2A Profile (Rapid)						
Complete Micro Profile (Rapid)	USP, AOAC					
Total Plate Count (High Count)	USP <2021>	100	Record Only	None Detected	cfu's/g	
Coliforms	AOAC 991.14	100	Record Only	None Detected	cfu's/g	
E. coli	USP <2022>	Absent	Record Only	Absent	cfu's/10g	
Staphylococcus aureus	USP <2022>	Absent	Record Only	Absent	cfu's/10g	
Salmonella	USP <2022>	Absent	Record Only	Absent	cfu's/10g	
Yeast and Mold (High Count, Rapid)	AOAC RI	100	Record Only	None Detected	cfu's/g	
Heavy Metals	ARL ICPMS					
Arsenic (As)	ARL ICPMS	0.001	Record Only	0.747	ppm	
Cadmium (Cd)	ARL ICPMS	0.001	Record Only	0.030	ppm	
Mercury (Hg)	ARL ICPMS	0.001	Record Only	0.043	ppm	
Lead (Pb)	ARL ICPMS	0.001	Record Only	0.805	ppm	
Mitragynine Package	HPLC 2.046					
Mitragynine	HPLC 2.046	0.1	Record Only	1.3	%	
7-Hydroxy-Mitragynine	HPLC 2.046	0.04	Record Only	<0.04	%	1

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Jan 27, 2021  
Page 1

\* ARL is an ISO/IEC 17025:2017 Accredited Laboratory. Uncertainty data for ISO-scoped methods is available upon request. Certificate and Supplement also available upon request.

This Certificate of Analysis represents data only for the sample provided and does not constitute a guarantee of quality for the entire production lot.