



Prague, 26<sup>th</sup> March 2024  
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Ref. n.: 209-01-2024-BAFA

### CERTIFICATE OF ANALYSIS

Customer:  
Dalibor Bryja - RageFitness  
Pekařská 67  
Opava, 746 01  
IČ: 05374090  
DIČ: CZ9004075817

**sample identification:** *Mitragyna speciosa* (kratom)  
**BAFA identifier:** 2024-055-PV  
**required analysis:** quantitative analysis of Mitragynine a 7-Hydroxy-Mitragynine, determination of presence and concentration of heavy metal (Cd, Pb, Hg, As)  
**date of analysis:** 24.3.2024  
**method:** HPLC-MS-MRM, ICP-OES elemental analysis  
**instrumentation:** LC/MS Thermo Ultimate 3000; AB Sciex, Qtrap 6500+ ; GBC Integra XL ICP-OES

#### analytical results:

Sample Customer identifier	mitragynin <sup>1)</sup>		7-hydroxymitragynin <sup>1)</sup>	
	mg/g	w. %	mg/g	w. %
Pure Red	10,615	1,0615	0,058	0,0058
LOD (limit of detection)	0,001	0,0001	0,001	0,0001
LOQ (limit of quantification)	0,003	0,0003	0,003	0,0003
Method:	HPLC-MS-MRM		HPLC-MS-MRM	
	Measured Value (mg/kg)	LOD (mg/kg)	Limits by regulation 629/2008/ES (mg/kg)	
Cadmium (Cd)	0	0,05	1,0	
Lead (Pb)	0	0,05	3,0	
Mercury (Hg)	0	0,05	0,1	
Arsenic (As)	0	0,05	0,2*	

The analysis was carried out in accordance with the requirements of the Czech-Slovak Association for Kratom

Analysis responsible person:  
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Mgr. Ing. Marek Martinec, Ph.D

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