



Certificate of Analysis

Customer Information		Testing Facility	
Client:	Steding and Sons Mercantile	Lab:	Cora Science, LLC
Attention:	(737) 895-2303	Address	8000 Anderson Square, STE 113
Address:	1501 Panther Loop #7A		Austin, Texas 78757
	Pflugerville, TX 78660	Contact:	info@corascience.com
			(512) 856-5007

Sample Image(s)	Sample Information
	Name: Lazy Luau Lot Number: SSLL00101 Description: Ready-to-drink botanical infused beverage Condition: Good Job ID: ISO05362 Sample ID: I14824 Received: 27OCT2025 Completed: 31OCT2025 Issued: 03NOV2025

Test Results

Mitragyna Alkaloids (UHPLC-DAD)		Method Code: T102		Tested: 31OCT2025 0226		
PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES	
Mitragynine	Report Results	44.4	mg/unit	0.0025	N/A	
7-Hydroxymitragynine	Report Results	0.187	mg/unit	0.0025	N/A	
Paynantheine	Report Results	0.448	mg/unit	0.0025	N/A	
Speciogynine	Report Results	0.219	mg/unit	0.0025	N/A	
Speciociliatine	Report Results	<LOQ	mg/unit	0.0025	N/A	
Total Mitragyna Alkaloids	Report Results	45.3	mg/unit	0.0025	N/A	

Mitragyna Alkaloids (UHPLC-DAD)		Method Code: T102		Tested: 31OCT2025 0226		
PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES	
Mitragynine	Report Results	0.145	w/w%	0.0000080	N/A	
7-Hydroxymitragynine	Report Results	0.000608	w/w%	0.0000080	N/A	
Paynantheine	Report Results	0.00146	w/w%	0.0000080	N/A	
Speciogynine	Report Results	0.000714	w/w%	0.0000080	N/A	
Speciociliatine	Report Results	<LOQ	w/w%	0.0000080	N/A	
Total Mitragyna Alkaloids	Report Results	0.148	w/w%	0.0000080	N/A	

Elemental Impurities (ICP-MS)		Method Code: T301		Tested: 30OCT2025 1231		
PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES	
Arsenic	NMT 2.00	0.014	ug/g	0.006	PASS	
Cadmium	NMT 0.82	0.033	ug/g	0.002	PASS	
Mercury	NMT 0.40	<LOQ	ug/g	0.002	PASS	
Lead	NMT 1.20	0.008	ug/g	0.002	PASS	

Residual Solvents: Class I (GC-MS)		Method Code: T201		Tested: 30OCT2025 1120	
PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
1,1-Dichloroethene	NMT 8	<LOQ	ug/g	0.40	PASS
1,1,1-Trichloroethane	NMT 1500	<LOQ	ug/g	75	PASS
Tetrachloromethane	NMT 4	<LOQ	ug/g	0.20	PASS
Benzene	NMT 2	<LOQ	ug/g	0.10	PASS
1,2-Dichloroethane	NMT 5	<LOQ	ug/g	0.25	PASS

Residual Solvents: Class II (GC-MS)		Method Code: T201		Tested: 30OCT2025 1120	
PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Methanol	NMT 3000	<LOQ	ug/g	75	PASS
Acetonitrile	NMT 410	<LOQ	ug/g	41	PASS
Dichloromethane	NMT 600	<LOQ	ug/g	15	PASS
1,2-Dichloroethene, (E)	NMT 1870	<LOQ	ug/g	47	PASS
1,2-Dichloroethene, (Z)	NMT 1870	<LOQ	ug/g	47	PASS
Tetrahydrofuran	NMT 720	<LOQ	ug/g	18	PASS
Cyclohexane	NMT 3880	<LOQ	ug/g	97	PASS
Methylcyclohexane	NMT 1180	<LOQ	ug/g	30	PASS
1,4-Dioxane	NMT 380	<LOQ	ug/g	38	PASS
Toluene	NMT 890	<LOQ	ug/g	22	PASS
Chlorobenzene	NMT 360	<LOQ	ug/g	9.0	PASS
Ethylbenzene	NMT 2170	<LOQ	ug/g	54	PASS
o/p-Xylene	NMT 2170	<LOQ	ug/g	54	PASS
m-Xylene	NMT 2170	<LOQ	ug/g	54	PASS
Isopropylbenzene	NMT 70	<LOQ	ug/g	1.8	PASS
Hexane	NMT 290	<LOQ	ug/g	7.3	PASS
Nitromethane	NMT 50	<LOQ	ug/g	1.3	PASS
Chloroform	NMT 60	<LOQ	ug/g	1.5	PASS
1,2-Dimethoxyethane	NMT 100	<LOQ	ug/g	2.5	PASS
Trichloroethene	NMT 80	<LOQ	ug/g	2.0	PASS
Pyridine	NMT 200	<LOQ	ug/g	5.0	PASS
2-Hexanone	NMT 50	<LOQ	ug/g	5.0	PASS
Tetralin	NMT 100	<LOQ	ug/g	2.5	PASS

Residual Solvents: Class III (GC-MS)		Method Code: T201		Tested: 30OCT2025 1120	
PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Pentane	NMT 5000	<LOQ	ug/g	125	PASS
Ethanol	NMT 5000	<LOQ	ug/g	125	PASS
Diethyl Ether	NMT 5000	<LOQ	ug/g	125	PASS
Acetone	NMT 5000	<LOQ	ug/g	125	PASS
Ethyl Formate	NMT 5000	<LOQ	ug/g	125	PASS
Isopropanol	NMT 5000	<LOQ	ug/g	125	PASS
Methyl Acetate	NMT 5000	<LOQ	ug/g	125	PASS
Methyl tert-Butyl Ether	NMT 5000	<LOQ	ug/g	125	PASS
1-Propanol	NMT 5000	<LOQ	ug/g	125	PASS
2-Butanone	NMT 5000	<LOQ	ug/g	125	PASS

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Ethyl Acetate	NMT 5000	<LOQ	ug/g	125	PASS
2-Butanol	NMT 5000	<LOQ	ug/g	125	PASS
2-Methyl-1-Propanol	NMT 5000	<LOQ	ug/g	125	PASS
Isopropyl Acetate	NMT 5000	<LOQ	ug/g	125	PASS
Heptane	NMT 5000	<LOQ	ug/g	125	PASS
1-Butanol	NMT 5000	<LOQ	ug/g	125	PASS
Propyl Acetate	NMT 5000	<LOQ	ug/g	125	PASS
4-Methyl-2-Pentanone	NMT 5000	<LOQ	ug/g	125	PASS
Isoamyl Alcohol	NMT 5000	<LOQ	ug/g	125	PASS
Isobutyl Acetate	NMT 5000	<LOQ	ug/g	125	PASS
1-Pentanol	NMT 5000	<LOQ	ug/g	125	PASS
Butyl Acetate	NMT 5000	<LOQ	ug/g	125	PASS
Anisole	NMT 5000	<LOQ	ug/g	125	PASS
Dimethylsulfoxide	NMT 5000	<LOQ	ug/g	125	PASS

Microbiological Examination		Method Code: T005		Tested: 28OCT2025 1426	
PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Total Aerobic Plate Count	NMT 10,000 CFU/g	<LOQ	CFU/g	10 CFU/g	PASS
Total Yeast and Mold	NMT 1,000 CFU/g	<LOQ	CFU/g	10 CFU/g	PASS
Total Coliforms	NMT 100 CFU/g	<LOQ	CFU/g	10 CFU/g	PASS
Escherichia coli	Not Detected in 10 g	Not Detected	N/A	1 CFU/10g	PASS
Salmonella spp.	Not Detected in 25 g	Not Detected	N/A	1 CFU/25g	PASS

7-Hydroxymitragynine Limit (0.04%)		Method Code: 813		Tested: 31OCT2025 0226	
PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
7-Hydroxymitragynine	NMT 400 PPM	124	ppm	2	PASS

Kavalactones (UHPLC-DAD)		Method Code: T104		Tested: 31OCT2025 0552	
PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Kavain	Report Results	0.163	w/w%	0.0016	N/A
Dihydrokavain	Report Results	0.334	w/w%	0.0016	N/A
Methysticin	Report Results	0.132	w/w%	0.0016	N/A
Dihydromethysticin	Report Results	0.197	w/w%	0.0016	N/A
Yangonin	Report Results	0.0945	w/w%	0.0016	N/A
Desmethoxyyangonin	Report Results	0.0836	w/w%	0.0016	N/A
Flavokawain A	Report Results	0.0101	w/w%	0.0016	N/A
Flavokawain B	Report Results	0.0174	w/w%	0.0016	N/A
Flavokawain C	Report Results	<LOQ	w/w%	0.0016	N/A
Total Kavalactones	Report Results	1.00	w/w%	0.0016	N/A

Kavalactones (UHPLC-DAD)		Method Code: T104		Tested: 31OCT2025 0552	
PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Kavain	Report Results	50.0	mg/unit	0.49	N/A
Dihydrokavain	Report Results	103	mg/unit	0.49	N/A
Methysticin	Report Results	40.5	mg/unit	0.49	N/A

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Dihydromethysticin	Report Results	60.5	mg/unit	0.49	N/A
Yangonin	Report Results	29.0	mg/unit	0.49	N/A
Desmethoxyyangonin	Report Results	25.7	mg/unit	0.49	N/A
Flavokawain A	Report Results	3.11	mg/unit	0.49	N/A
Flavokawain B	Report Results	5.35	mg/unit	0.49	N/A
Flavokawain C	Report Results	<LOQ	mg/unit	0.49	N/A
Total Kavalactones	Report Results	308	mg/unit	0.49	N/A

Moisture Content		Method Code: T505		Tested: 30OCT2025 1216	
PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Moisture	Report Results	95.1	%	0.1	N/A

Additional Report Notes

T102 result, LOQ and unit converted from w/w% to mg/unit using a laboratory measured density of 1.024 g/mL and a package-specified product volume of 30.0 mL. T813 results are reported on a dry-weight basis (DWB). Reported values converted from T102 results using the laboratory-measured moisture content by T505 for each sample:
DWB w/w% = (as-received w/w%) ÷ (1 – moisture%/100).

Revision History

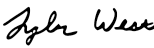
rev 00 - Initial release.

Abbreviations

ID: identification, **N/A:** not applicable, **LOQ:** limit of quantitation, **CFU:** colony forming units, **w/w%:** weight by weight percent, **mg:** milligrams, **g:** grams, **ug:** micrograms, **mL:** milliliters, **ND:** not detected, **<LOQ:** below limit of quantitation, **NMT:** no more than, **NLT:** no less than, **UHPLC:** ultra-high performance liquid chromatography, **GC:** gas chromatography, **DAD:** diode array detection/detector, **MS:** mass spectroscopy/spectrometer, **ICP:** inductively coupled plasma, **ISO:** International Organization for Standardization, **USP:** United States Pharmacopeia

Authorization

This report has been authorized for release from Cora Science by:

Signature:		Position:	Laboratory Director
Name:	Tyler West	Department:	Management
		Date:	03NOV2025