

Certificate of Analysis



Customer Information

Client: Steding and Sons Mercantile
Attention: (737) 895-2303
Address: 1501 Panther Loop #7A
 Pflugerville, TX 78660

Testing Facility

Lab: Cora Science, LLC
Address: 8000 Anderson Square, STE 113
 Austin, Texas 78757
Contact: info@corascience.com
 (512) 856-5007

Sample Image(s)



Sample Information

Name: Lizzy's Lazy Lemonade
Lot Number: SSLM0001
Description: Botanical-infused drink mix
Condition: Good
Job ID: ISO02917
Sample ID: I07379
Received: 05DEC2024
Completed: 12DEC2024
Issued: 13DEC2024

Test Results

Kavalactones (UHPLC-DAD)

Method Code: T104

Tested: 12DEC2024 | 2244

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Kavain	Report Results	122	mg/unit	0.70	N/A
Dihydrokavain	Report Results	85.6	mg/unit	0.70	N/A
Methysticin	Report Results	35.8	mg/unit	0.70	N/A
Dihydromethysticin	Report Results	32.1	mg/unit	0.70	N/A
Yangonin	Report Results	50.3	mg/unit	0.70	N/A
Desmethoxyyangonin	Report Results	43.8	mg/unit	0.70	N/A
Flavokawain A	Report Results	4.51	mg/unit	0.70	N/A
Flavokawain B	Report Results	6.18	mg/unit	0.70	N/A
Flavokawain C	Report Results	<LOQ	mg/unit	0.70	N/A
Total Kavalactones	Report Results	370	mg/unit	0.70	N/A

Kavalactones (UHPLC-DAD)

Method Code: T104

Tested: 12DEC2024 | 2244

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Kavain	Report Results	1.22	w/w%	0.007	N/A
Dihydrokavain	Report Results	0.856	w/w%	0.007	N/A
Methysticin	Report Results	0.358	w/w%	0.007	N/A
Dihydromethysticin	Report Results	0.321	w/w%	0.007	N/A
Yangonin	Report Results	0.503	w/w%	0.007	N/A
Desmethoxyyangonin	Report Results	0.438	w/w%	0.007	N/A
Flavokawain A	Report Results	0.045	w/w%	0.007	N/A
Flavokawain B	Report Results	0.062	w/w%	0.007	N/A
Flavokawain C	Report Results	<LOQ	w/w%	0.007	N/A
Total Kavalactones	Report Results	3.70	w/w%	0.007	N/A

Mitragyna Alkaloids (UHPLC-DAD)

Method Code: T102

Tested: 12DEC2024 | 0631

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PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Mitragynine	Report Results	50.8	mg/unit	0.540	N/A
7-Hydroxymitragynine	Report Results	<LOQ	mg/unit	0.144	N/A
Paynantheine	Report Results	1.26	mg/unit	0.540	N/A
Speciogynine	Report Results	1.01	mg/unit	0.540	N/A
Speciociliatine	Report Results	<LOQ	mg/unit	0.540	N/A
Total Mitragyna Alkaloids	Report Results	53.0	mg/unit	0.540	N/A

Mitragyna Alkaloids (UHPLC-DAD)

Method Code: T102

Tested: 12DEC2024 | 0631

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Mitragynine	Report Results	0.508	w/w%	0.0054	N/A
7-Hydroxymitragynine	Report Results	<LOQ	w/w%	0.0014	N/A
Paynantheine	Report Results	0.013	w/w%	0.0054	N/A
Speciogynine	Report Results	0.010	w/w%	0.0054	N/A
Speciociliatine	Report Results	<LOQ	w/w%	0.0054	N/A
Total Mitragyna Alkaloids	Report Results	0.530	w/w%	0.0054	N/A

Residual Solvents: Class I (GC-MS)

Method Code: T201

Tested: 08DEC2024 | 1738

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
1,1-Dichloroethene	NMT 8	<LOQ	ug/g	0.4	PASS
1,1,1-Trichloroethane	NMT 1500	<LOQ	ug/g	75	PASS
Tetrachloromethane	NMT 4	<LOQ	ug/g	0.2	PASS
Benzene	NMT 2	<LOQ	ug/g	0.1	PASS
1,2-Dichloroethane	NMT 5	<LOQ	ug/g	0.25	PASS

Residual Solvents: Class II (GC-MS)

Method Code: T201

Tested: 08DEC2024 | 1738

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Methanol	NMT 3000	<LOQ	ug/g	94	PASS
Acetonitrile	NMT 410	<LOQ	ug/g	10.25	PASS
Dichloromethane	NMT 600	<LOQ	ug/g	15	PASS
1,2-Dichloroethene, (E)	NMT 1870	<LOQ	ug/g	46.75	PASS
1,2-Dichloroethene, (Z)	NMT 1870	<LOQ	ug/g	46.75	PASS
Tetrahydrofuran	NMT 720	<LOQ	ug/g	18	PASS
Cyclohexane	NMT 3880	<LOQ	ug/g	97	PASS
Methylcyclohexane	NMT 1180	<LOQ	ug/g	29.5	PASS
1,4-Dioxane	NMT 380	<LOQ	ug/g	9.5	PASS
Toluene	NMT 890	<LOQ	ug/g	22.25	PASS
Chlorobenzene	NMT 360	<LOQ	ug/g	9	PASS
Ethylbenzene	NMT 2170	<LOQ	ug/g	54.25	PASS
o/p-Xylene	NMT 2170	<LOQ	ug/g	54.25	PASS
m-Xylene	NMT 2170	<LOQ	ug/g	54.25	PASS
Isopropylbenzene	NMT 70	<LOQ	ug/g	1.75	PASS
Hexane	NMT 290	<LOQ	ug/g	7.25	PASS
Nitromethane	NMT 50	<LOQ	ug/g	1.25	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	PASS
Pyridine	NMT 200	<LOQ	ug/g	5	PASS
2-Hexanone	NMT 50	<LOQ	ug/g	1.25	PASS
Tetralin	NMT 100	<LOQ	ug/g	2.5	PASS

Residual Solvents: Class III (GC-MS)

Method Code: T201

Tested: 08DEC2024 | 1738

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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
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
Dimethylsulfoxide	NMT 5000	<LOQ	ug/g	125	PASS
Anisole	NMT 5000	<LOQ	ug/g	125	PASS

Elemental Impurities (ICP-MS)

Method Code: T301

Tested: 09DEC2024 | 1530

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Arsenic	NMT 2.00	0.011	ug/g	0.006	PASS
Cadmium	NMT 0.82	0.003	ug/g	0.002	PASS
Mercury	NMT 0.40	<LOQ	ug/g	0.002	PASS
Lead	NMT 1.20	0.011	ug/g	0.002	PASS

Microbiological Examination

Method Code: T005

Tested: 05DEC2024 | 1604

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Total Aerobic Plate Count	10,000,000 CFU / g	Not Detected	CFU/g	20 CFU / g	PASS
Total Yeast and Mold	100,000 CFU / g	Not Detected	CFU/g	20 CFU / g	PASS
Total Coliforms	10,000 CFU / g	Not Detected	CFU/g	20 CFU / g	PASS
Escherichia coli	Not Detected in 10 g	Not Detected	N/A	1 CFU / 10 g	PASS
Salmonella	Not Detected in 25 g	Not Detected	N/A	1 CFU / 25 g	PASS

Additional Report Notes

T102 and T104 result, LOQ and unit converted from w/w% to mg/unit using a package specified unit weight of 10.0 grams.

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:	13DEC2024