Certificate of Analysis





Test Results

Mitragyna Alkaloids (UHPLC-DAD)		Method Co	Method Code: T102		Tested: 26JUL2024 1545	
PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES	
Mitragynine	Report Results	1.56	w/w%	0.006	N/A	
7-Hydroxymitragynine	Report Results	0.003	w/w%	0.001	N/A	
Paynantheine	Report Results	0.299	w/w%	0.006	N/A	
Speciogynine	Report Results	0.218	w/w%	0.006	N/A	
Speciocilatine	Report Results	0.501	w/w%	0.006	N/A	
Total Mitragyna Alkaloids	Report Results	2.58	w/w%	0.006	N/A	
Elemental Impurities (ICP-MS)		Method Code: T301		Tested: 31JUL2024 1333		
PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES	
Arsenic	NMT 2.0	0.296	ug/g	0.006	PASS	
Cadmium	NMT 0.5	<loq< td=""><td>ug/g</td><td>0.002</td><td>PASS</td></loq<>	ug/g	0.002	PASS	
Lead	NMT 5.0	0.329	ug/g	0.002	PASS	
Mercury	NMT 0.2	0.0159	ug/g	0.002	PASS	

Method Code: T201

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
1,1-Dichloroethene	NMT 8	<loq< td=""><td>ug/g</td><td>0.40</td><td>PASS</td></loq<>	ug/g	0.40	PASS
1,1,1-Trichloroethane	NMT 1500	<loq< td=""><td>ug/g</td><td>75.0</td><td>PASS</td></loq<>	ug/g	75.0	PASS
Tetrachloromethane	NMT 4	<loq< td=""><td>ug/g</td><td>0.20</td><td>PASS</td></loq<>	ug/g	0.20	PASS
Benzene	NMT 2	<loq< td=""><td>ug/g</td><td>0.10</td><td>PASS</td></loq<>	ug/g	0.10	PASS
1,2-Dichloroethane	NMT 5	<loq< td=""><td>ug/g</td><td>0.25</td><td>PASS</td></loq<>	ug/g	0.25	PASS
Residual Solvents: Class II (GC-MS)		Method Code: T201 Tested: 3		31JUL2024 0232	

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Work Order ID: ISO02308 - Sample Id: I05434 - Received Date: 26JUL2024 - Issued Date: 06AUG2024 - Page: 2

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Methanol	NMT 3000	<loq< td=""><td>ug/g</td><td>94</td><td>PASS</td></loq<>	ug/g	94	PASS
Acetonitrile	NMT 410	<loq< td=""><td>ug/g</td><td>20.5</td><td>PASS</td></loq<>	ug/g	20.5	PASS
Dichloromethane	NMT 600	<loq< td=""><td>ug/g</td><td>30.0</td><td>PASS</td></loq<>	ug/g	30.0	PASS
1,2-Dichloroethene, (E)	NMT 1870	<loq< td=""><td>ug/g</td><td>93.5</td><td>PASS</td></loq<>	ug/g	93.5	PASS
1,2-Dichloroethene, (Z)	NMT 1870	<loq< td=""><td>ug/g</td><td>93.5</td><td>PASS</td></loq<>	ug/g	93.5	PASS
Tetrahydrofuran	NMT 720	<loq< td=""><td>ug/g</td><td>36.0</td><td>PASS</td></loq<>	ug/g	36.0	PASS
Cyclohexane	NMT 3880	<loq< td=""><td>ug/g</td><td>194</td><td>PASS</td></loq<>	ug/g	194	PASS
Methylcyclohexane	NMT 1180	<loq< td=""><td>ug/g</td><td>59.0</td><td>PASS</td></loq<>	ug/g	59.0	PASS
1,4-Dioxane	NMT 380	<loq< td=""><td>ug/g</td><td>19.0</td><td>PASS</td></loq<>	ug/g	19.0	PASS
Toluene	NMT 890	<loq< td=""><td>ug/g</td><td>44.5</td><td>PASS</td></loq<>	ug/g	44.5	PASS
Chlorobenzene	NMT 360	<loq< td=""><td>ug/g</td><td>18.0</td><td>PASS</td></loq<>	ug/g	18.0	PASS
Ethylbenzene	NMT 2170	<loq< td=""><td>ug/g</td><td>109</td><td>PASS</td></loq<>	ug/g	109	PASS
o/p-Xylene	NMT 2170	<loq< td=""><td>ug/g</td><td>109</td><td>PASS</td></loq<>	ug/g	109	PASS
m-Xylene	NMT 2170	<loq< td=""><td>ug/g</td><td>109</td><td>PASS</td></loq<>	ug/g	109	PASS
lsopropylbenzene	NMT 70	<loq< td=""><td>ug/g</td><td>3.50</td><td>PASS</td></loq<>	ug/g	3.50	PASS
Hexane	NMT 290	<loq< td=""><td>ug/g</td><td>14.5</td><td>PASS</td></loq<>	ug/g	14.5	PASS
Nitromethane	NMT 50	<loq< td=""><td>ug/g</td><td>2.50</td><td>PASS</td></loq<>	ug/g	2.50	PASS
Chloroform	NMT 60	222	ug/g	3.00	FAIL
1,2-Dimethoxyethane	NMT 100	<loq< td=""><td>ug/g</td><td>5.00</td><td>PASS</td></loq<>	ug/g	5.00	PASS
Trichloroethene	NMT 80	<loq< td=""><td>ug/g</td><td>4.00</td><td>PASS</td></loq<>	ug/g	4.00	PASS
Pyridine	NMT 200	<loq< td=""><td>ug/g</td><td>10.00</td><td>PASS</td></loq<>	ug/g	10.00	PASS
2-Hexanone	NMT 50	<loq< td=""><td>ug/g</td><td>2.50</td><td>PASS</td></loq<>	ug/g	2.50	PASS
Tetralin	NMT 100	<loq< td=""><td>ug/g</td><td>5.00</td><td>PASS</td></loq<>	ug/g	5.00	PASS

Residual Solvents: Class III (GC-MS)

Method Code: T201

Tested: 31JUL2024 | 0232

	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Pentane	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
Ethanol	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
Diethyl Ether	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
Acetone	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
Ethyl Formate	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
sopropanol	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
Methyl Acetate	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
Methyl tert-Butyl Ether	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
1-Propanol	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
2-Butanone	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
Ethyl Acetate	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
2-Butanol	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
2-Methyl-1-Propanol	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
sopropyl Acetate	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
Heptane	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
1-Butanol	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
Propyl Acetate	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
4-Methyl-2-Pentanone	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
soamyl Alcohol	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
sobutyl Acetate	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
1-Pentanol	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
Butyl Acetate	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
Dimethylsulfoxide	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS
	NMT 5000	<loq< td=""><td>ug/g</td><td>250</td><td>PASS</td></loq<>	ug/g	250	PASS

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Work Order ID: ISO02308 - Sample Id: I05434 - Received Date: 26JUL2024 - Issued Date: 06AUG2024 - Page: 3

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

Additional Report Notes

N/A

Revision History

rev 00 - Initial release. rev 01 - Added T005, T201, and T301 results.

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:

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John Wear

Name:

Tyler West

Position: Department: Date:

Laboratory Director Management 06AUG2024

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