

# Certificate of Analysis



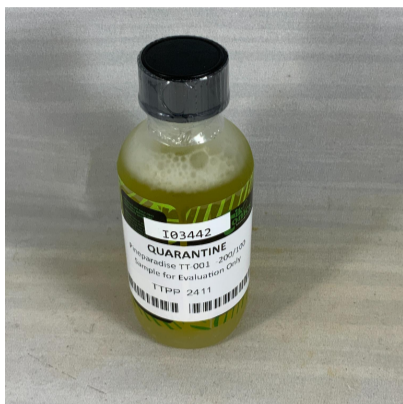
## Customer Information

**Client:** CWL Brands  
**Attention:** (208) 563-5192  
**Address:** 11193 W Emerald St, STE 140  
Boise, ID 83713

## 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:** Pineapple Paradise  
**Lot Number:** TTPP 2411  
**Description:** Liquid botanical extract  
**Condition:** Good  
**Job ID:** ISO01678  
**Sample ID:** I03442  
**Received:** 26JAN2024  
**Completed:** 05FEB2024  
**Issued:** 06FEB2024

## Test Results

### Kavalactones (UHPLC-DAD)

Method Code: T104

Tested: 26JAN2024 | 1941

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Kavain	Report Results	0.089	w/w%	0.003	N/A
Dihydrokavain	Report Results	0.162	w/w%	0.003	N/A
Methysticin	Report Results	0.031	w/w%	0.003	N/A
Dihydromethysticin	Report Results	0.034	w/w%	0.003	N/A
Yangonin	Report Results	0.033	w/w%	0.003	N/A
Desmethoxyyangonin	Report Results	0.051	w/w%	0.003	N/A
Flavokawain A	Report Results	0.007	w/w%	0.003	N/A
Flavokawain B	Report Results	0.009	w/w%	0.003	N/A
Flavokawain C	Report Results	<LOQ	w/w%	0.003	N/A
Total Kavalactones	Report Results	0.399	w/w%	0.003	N/A

### Kavalactones (UHPLC-DAD)

Method Code: T104

Tested: 26JAN2024 | 1941

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Kavain	Report Results	0.916	mg/mL	0.03	N/A
Dihydrokavain	Report Results	1.66	mg/mL	0.03	N/A
Methysticin	Report Results	0.316	mg/mL	0.03	N/A
Dihydromethysticin	Report Results	0.348	mg/mL	0.03	N/A
Yangonin	Report Results	0.338	mg/mL	0.03	N/A
Desmethoxyyangonin	Report Results	0.522	mg/mL	0.03	N/A
Flavokawain A	Report Results	0.069	mg/mL	0.03	N/A
Flavokawain B	Report Results	0.096	mg/mL	0.03	N/A
Flavokawain C	Report Results	<LOQ	mg/mL	0.03	N/A
Total Kavalactones	Report Results	4.10	mg/mL	0.03	N/A

### Mitragyna Alkaloids (UHPLC-DAD)

Method Code: T102

Tested: 27JAN2024 | 2157

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Mitragynine	Report Results	1.77	mg/mL	0.03	N/A
7-Hydroxymitragynine	Report Results	<LOQ	mg/mL	0.01	N/A
Paynantheine	Report Results	0.266	mg/mL	0.03	N/A
Speciogynine	Report Results	0.212	mg/mL	0.03	N/A
Speciociliatine	Report Results	0.517	mg/mL	0.03	N/A
Total Mitragyna Alkaloids	Report Results	2.76	mg/mL	0.03	N/A

**Mitragyna Alkaloids (UHPLC-DAD)**

Method Code: T102

Tested: 27JAN2024 | 2157

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Mitragynine	Report Results	0.172	w/w%	0.003	N/A
7-Hydroxymitragynine	Report Results	<LOQ	w/w%	0.001	N/A
Paynantheine	Report Results	0.026	w/w%	0.003	N/A
Speciogynine	Report Results	0.021	w/w%	0.003	N/A
Speciociliatine	Report Results	0.050	w/w%	0.003	N/A
Total Mitragyna Alkaloids	Report Results	0.269	w/w%	0.003	N/A

**Elemental Impurities (ICP-MS)**

Method Code: T301

Tested: 04FEB2024 | 1441

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Arsenic	NMT 1.5	<LOQ	ug/g	0.043	PASS
Cadmium	NMT 0.5	<LOQ	ug/g	0.0086	PASS
Lead	NMT 0.5	<LOQ	ug/g	0.0086	PASS
Mercury	NMT 3.0	<LOQ	ug/g	0.0086	PASS

**Microbiological Examination**

Method Code: T005

Tested: 31JAN2024 | 1210

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Total Aerobic Plate Count	10,000,000 CFU/gram	Not Detected	CFU/gram	10 CFU/gram	PASS
Total Yeast & Mold	100,000 CFU/gram	Not Detected	CFU/gram	10 CFU/gram	PASS
Total Coliforms	10,000 CFU/gram	Not Detected	CFU/gram	10 CFU/gram	PASS
Escherichia coli	Not Detected in 10 grams	Not Detected	N/A	1 CFU/10 grams	PASS
Staphylococcus aureus	Not Detected in 10 grams	Not Detected	N/A	1 CFU/10 grams	PASS
Salmonella	Not Detected in 25 grams	Not Detected	N/A	1 CFU/25 grams	PASS

**Residual Solvents (GC-MS)**

Method Code: T201

Tested: 05FEB2024 | 2352

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	75.0	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
Methanol	NMT 3000	<LOQ	ug/g	150	PASS
Acetonitrile	NMT 410	<LOQ	ug/g	21	PASS
Dichloromethane	NMT 600	<LOQ	ug/g	30	PASS
1,2-Dichloroethene, (E)	NMT 1870	<LOQ	ug/g	94	PASS
1,2-Dichloroethene, (Z)	NMT 1870	<LOQ	ug/g	94	PASS
Tetrahydrofuran	NMT 720	<LOQ	ug/g	36	PASS
Cyclohexane	NMT 3880	<LOQ	ug/g	194	PASS
Methylcyclohexane	NMT 1180	<LOQ	ug/g	59	PASS
1,4-Dioxane	NMT 380	<LOQ	ug/g	19	PASS
Toluene	NMT 890	<LOQ	ug/g	45	PASS
Chlorobenzene	NMT 360	<LOQ	ug/g	18	PASS
Ethylbenzene	NMT 2170	<LOQ	ug/g	109	PASS
o/p-Xylene	NMT 2170	<LOQ	ug/g	109	PASS
m-Xylene	NMT 2170	<LOQ	ug/g	109	PASS
Isopropylbenzene	NMT 70	<LOQ	ug/g	3.5	PASS
Hexane	NMT 290	<LOQ	ug/g	15	PASS
Nitromethane	NMT 50	<LOQ	ug/g	2.5	PASS
Chloroform	NMT 60	<LOQ	ug/g	3.0	PASS
1,2-Dimethoxyethane	NMT 100	<LOQ	ug/g	5.0	PASS
Trichloroethene	NMT 80	<LOQ	ug/g	4.0	PASS
Pyridine	NMT 200	<LOQ	ug/g	10	PASS
2-Hexanone	NMT 50	<LOQ	ug/g	2.5	PASS
Tetralin	NMT 100	<LOQ	ug/g	5.0	PASS
Pentane	NMT 5000	<LOQ	ug/g	250	PASS
Ethanol	NMT 5000	<LOQ	ug/g	250	PASS
Diethyl Ether	NMT 5000	<LOQ	ug/g	250	PASS
Acetone	NMT 5000	<LOQ	ug/g	250	PASS
Ethyl Formate	NMT 5000	<LOQ	ug/g	250	PASS
Isopropanol	NMT 5000	<LOQ	ug/g	250	PASS
Methyl Acetate	NMT 5000	<LOQ	ug/g	250	PASS
Methyl tert-Butyl Ether	NMT 5000	<LOQ	ug/g	250	PASS
1-Propanol	NMT 5000	<LOQ	ug/g	250	PASS
2-Butanone	NMT 5000	<LOQ	ug/g	250	PASS
Ethyl Acetate	NMT 5000	<LOQ	ug/g	250	PASS
2-Butanol	NMT 5000	<LOQ	ug/g	250	PASS
2-Methyl-1-Propanol	NMT 5000	<LOQ	ug/g	250	PASS
Isopropyl Acetate	NMT 5000	<LOQ	ug/g	250	PASS
Heptane	NMT 5000	<LOQ	ug/g	250	PASS
1-Butanol	NMT 5000	<LOQ	ug/g	250	PASS
Propyl Acetate	NMT 5000	<LOQ	ug/g	250	PASS
4-Methyl-2-Pentanone	NMT 5000	<LOQ	ug/g	250	PASS
Isoamyl Alcohol	NMT 5000	<LOQ	ug/g	250	PASS
Isobutyl Acetate	NMT 5000	<LOQ	ug/g	250	PASS
1-Pentanol	NMT 5000	<LOQ	ug/g	250	PASS
Butyl Acetate	NMT 5000	<LOQ	ug/g	250	PASS
Dimethylsulfoxide	NMT 5000	<LOQ	ug/g	250	PASS
Anisole	NMT 5000	<LOQ	ug/g	250	PASS

## Additional Report Notes

T102 and T104 result, LOQ and unit converted from w/w% to mg/mL using a laboratory measured density of 1.027 g/mL. T301 performed by a registered outsourcing laboratory.

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## Revision History

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rev 00 - Initial release.

rev 01 - Added T005, T201, and T301 results.

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## Abbreviations

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**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


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## Authorization

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

**Signature:**



**Position:**

Laboratory Director

**Department:**

Management

**Name:**

Tyler West

**Date:**

06FEB2024