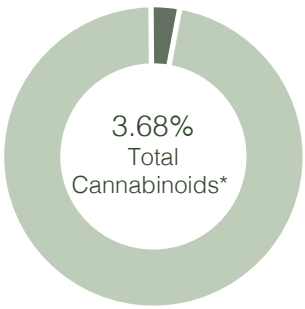
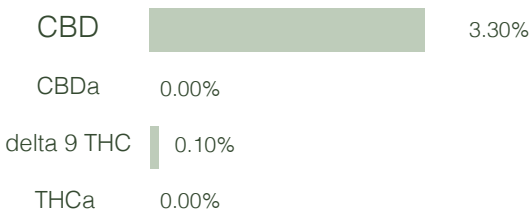
Hugs Mango & Raspberry Tinctures Certificate of Analysis

1000mg

Batch ID: Hug-MANGO1000-001 **Test ID:** 5423200.002
Reported: 26-Apr-2019 **Method:** TM14
Type: Concentrate
Test Potency

CANNABINOID PROFILE





Compound	LOQ(%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.15	0.0	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.07	0.10	1.0
Cannabidiolic Acid (CBDA)	0.07	0.0	0.0
Cannabidiol (CBD)	0.04	3.30	33.1
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.08	0.0	0.0
Cannabinolic Acid (CBNA)	0.20	0.0	0.0
Cannabinol (CBN)	0.09	0.0	0.0
Cannabigerolic Acid (CBGA)	0.13	0.0	0.0
Cannabigerol (CBG)	0.07	0.14	1.4
Tetrahydrocannabivarinic Acid (THCVA)	0.13	0.0	0.0
Tetrahydrocannabivarin (THCV)	0.07	0.0	0.0
Cannabidivarinic Acid (CBDVA)	0.06	0.0	0.0
Cannabidivarin (CBDV)	0.03	0.0	0.0
Cannabichromenic Acid (CBCA)	0.11	0.0	0.0
Cannabichromene (CBC)	0.13	0.14	1.4
Total Cannabinoids		**3.68**	**36.80**
Total Potential THC**		0.10	1.00
Total Potential CBD**		3.30	33.00

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)
* Total Cannabinoids result reflects the absolute sum of all cannabinoids detected
** Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.
Total THC = THC + (THCa *(0.877)) and Total CBD = CBD + (CBDa *(0.877))

Pesticides

Sample ID	Analyzed	Sample Description	Analysis	Result	Units	Method Code
1904904-001	4/24/2019	Hug_Mango1000_001	Salmonella spp.	Negative	/10g	Salm.1a
	4/24/2019		Listeria spp.	Negative	/10g	List.2
	4/24/2019		Aerobic Plate Count	< 10	CFU/g	APC.1a
	4/24/2019		Totali Coliform Bacteria	< 10	CFU/g	TC.1a
	4/24/2019		Escherichia coli	< 10	CFU/g	EC.1a
	4/24/2019		Yeast and Mold	< 10	CFU/g	Y&M.1a

Metals

*ND: Detected or below reportable threshold
All data in the folowing table is in parts per million (ppm)

Sample	METRC #	Arsenic	Lead	Cadmium	Mercury
295973	00120	ND	ND	ND	ND

Notes: The State of Colorado mandates the following levels for heavy metals: Lead (1 ppm), Arsenic (0.4 ppm), Cadmium (0.4 ppm) and Mercury (0.2 ppm). This testing is for R&D purposed only.

Solvents

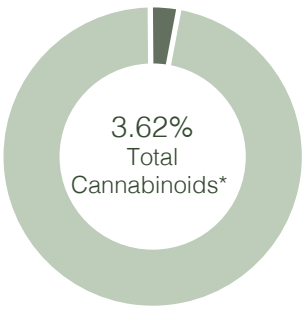
Date Lab Test: 06-Jun-2019
Lot Number: IL19051-029

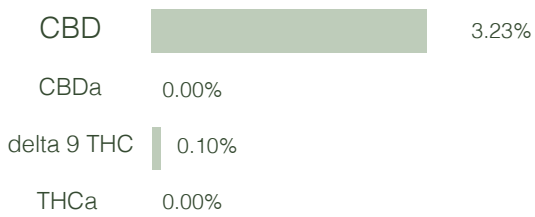
Test	Methodology	Specification	Test Results	Pass/Fail
Residual Pentane	Headspace GC-FID	≤ 500 ppm	< LOQ	Pass
Residual Acetone	Headspace GC-FID	≤ 500 ppm	< LOQ	Pass
Residual Isopropyl Alcohol	Headspace GC-FID	≤ 500 ppm	< LOQ	Pass
Residual Hexane	Headspace GC-FID	≤ 25 ppm	ND	Pass

Batch ID: Hug -RASP-1000-001
Reported: 26-Apr-2019
Type: Concentrate
Test Potency

Test ID: 5423200.004
Method: TM14

CANNABINOID PROFILE





Compound	LOQ(%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.15	0.0	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.07	0.10	1.0
Cannabidiolic Acid (CBDA)	0.07	0.0	0.0
Cannabidiol (CBD)	0.04	3.23	32.3
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.08	0.0	0.0
Cannabinolic Acid (CBNA)	0.20	0.0	0.0
Cannabinol (CBN)	0.09	0.0	0.0
Cannabigerolic Acid (CBGA)	0.13	0.0	0.0
Cannabigerol (CBG)	0.07	0.15	1.5
Tetrahydrocannabivarinic Acid (THCVA)	0.13	0.0	0.0
Tetrahydrocannabivarin (THCV)	0.07	0.0	0.0
Cannabidivarinic Acid (CBDVA)	0.06	0.0	0.0
Cannabidivarin (CBDV)	0.03	0.0	0.0
Cannabichromenic Acid (CBCA)	0.11	0.0	0.0
Cannabichromene (CBC)	0.13	0.14	1.4
Total Cannabinoids		**3.62**	**36.20**
Total Potential THC**		0.10	1.00
Total Potential CBD**		3.23	32.30

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)

* Total Cannabinoids result reflects the absolute sum of all cannabinoids detected

** Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.

Total THC = THC + (THCa *(0.877)) and Total CBD = CBD + (CBDa *(0.877))

NOTES

N/A

Pesticides

Sample ID	Analyzed	Sample Description	Analysis	Result	Units	Method Code
1904904-002	4/24/2019	Hug_Rasp1000_001	Salmonella spp.	Negative	/10g	Salm.1a
	4/24/2019		Listeria spp.	Negative	/10g	List.2
	4/24/2019		Aerobic Plate Count	< 10	CFU/g	APC.1a
	4/24/2019		Totali Coliform Bacteria	< 10	CFU/g	TC.1a
	4/24/2019		Escherichia coli	< 10	CFU/g	EC.1a
	4/24/2019		Yeast and Mold	< 10	CFU/g	Y&M.1a

Metals

*ND: Detected or below reportable threshold
All data in the folowing table is in parts per million (ppm)

Sample	METRC #	Arsenic	Lead	Cadmium	Mercury
295973	00120	ND	ND	ND	ND

Notes: The State of Colorado mandates the following levels for heavy metals: Lead (1 ppm), Arsenic (0.4 ppm), Cadmium (0.4 ppm) and Mercury (0.2 ppm). This testing is for R&D purposed only.

Solvents

Date Lab Test: 06-Jun-2019
Lot Number: IL19051-029

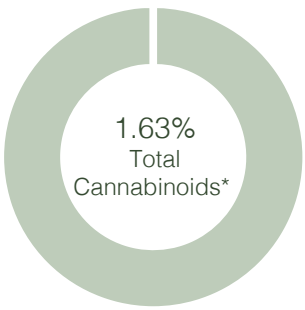
Test	Methodology	Specification	Test Results	Pass/Fail
Residual Pentane	Headspace GC-FID	≤ 500 ppm	< LOQ	Pass
Residual Acetone	Headspace GC-FID	≤ 500 ppm	< LOQ	Pass
Residual Isopropyl Alcohol	Headspace GC-FID	≤ 500 ppm	< LOQ	Pass
Residual Hexane	Headspace GC-FID	≤ 25 ppm	ND	Pass

Hugs Mango & Raspberry Tinctures Certificate of Analysis

500mg

Batch ID: Hug-MANGO500-001
Test ID: 5423200.003
Reported: 26-Apr-2019
Method: TM14
Type: Concentrate
Test Potency

CANNABINOID PROFILE



CBD		1.55%
CBDa	0.00%	
delta 9 THC	0.00%	
THCa	0.00%	

Compound	LOQ(%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.15	0.0	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.07	0.00	0.0
Cannabidiolic Acid (CBDA)	0.07	0.0	0.0
Cannabidiol (CBD)	0.04	1.55	15.5
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.08	0.0	0.0
Cannabinolic Acid (CBNA)	0.20	0.0	0.0
Cannabinol (CBN)	0.09	0.0	0.0
Cannabigerolic Acid (CBGA)	0.13	0.0	0.0
Cannabigerol (CBG)	0.07	0.08	0.8
Tetrahydrocannabivarinic Acid (THCVA)	0.13	0.0	0.0
Tetrahydrocannabivarin (THCV)	0.07	0.0	0.0
Cannabidivarinic Acid (CBDVA)	0.06	0.0	0.0
Cannabidivarin (CBDV)	0.03	0.0	0.0
Cannabichromenic Acid (CBCA)	0.11	0.0	0.0
Cannabichromene (CBC)	0.13	0.00	0.0
Total Cannabinoids		**1.63**	**16.30**
Total Potential THC**		0.00	0.00
Total Potential CBD**		1.55	15.50

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)

* Total Cannabinoids result reflects the absolute sum of all cannabinoids detected

** Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.

Total THC = THC + (THCa *(0.877)) and Total CBD = CBD + (CBDa *(0.877))

NOTES

N/A

Pesticides

Sample ID	Analyzed	Sample Description	Analysis	Result	Units	Method Code
1904904-003	4/24/2019	Hug_Mango500_001	Salmonella spp.	Negative	/10g	Salm.1a
	4/24/2019		Listeria spp.	Negative	/10g	List.2
	4/24/2019		Aerobic Plate Count	< 10	CFU/g	APC.1a
	4/24/2019		Totali Coliform Bacteria	< 10	CFU/g	TC.1a
	4/24/2019		Escherichia coli	< 10	CFU/g	EC.1a
	4/24/2019		Yeast and Mold	< 10	CFU/g	Y&M.1a

Metals

*ND: Detected or below reportable threshold
All data in the folowing table is in parts per million (ppm)

Sample	METRC #	Arsenic	Lead	Cadmium	Mercury
295973	00120	ND	ND	ND	ND

Notes: The State of Colorado mandates the following levels for heavy metals: Lead (1 ppm), Arsenic (0.4 ppm), Cadmium (0.4 ppm) and Mercury (0.2 ppm). This testing is for R&D purposed only.

Solvents

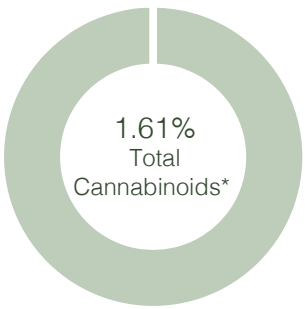
Date Lab Test: 06-Jun-2019
Lot Number: IL19051-029

Test	Methodology	Specification	Test Results	Pass/Fail
Residual Pentane	Headspace GC-FID	≤ 500 ppm	< LOQ	Pass
Residual Acetone	Headspace GC-FID	≤ 500 ppm	< LOQ	Pass
Residual Isopropyl Alcohol	Headspace GC-FID	≤ 500 ppm	< LOQ	Pass
Residual Hexane	Headspace GC-FID	≤ 25 ppm	ND	Pass

Batch ID: Hug -RASP-500-001
Reported: 26-Apr-2019
Type: Concentrate
Test Potency

Test ID: 5423200.005
Method: TM14

CANNABINOID PROFILE



CBD		1.61%
CBDa	0.00%	
delta 9 THC	0.00%	
THCa	0.00%	

Compound	LOQ(%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.15	0.0	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.07	0.00	0.0
Cannabidiolic Acid (CBDA)	0.07	0.0	0.0
Cannabidiol (CBD)	0.04	1.61	16.1
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.08	0.0	0.0
Cannabinolic Acid (CBNA)	0.20	0.0	0.0
Cannabinol (CBN)	0.09	0.0	0.0
Cannabigerolic Acid (CBGA)	0.13	0.0	0.0
Cannabigerol (CBG)	0.07	0.00	0.0
Tetrahydrocannabivarinic Acid (THCVA)	0.13	0.0	0.0
Tetrahydrocannabivarin (THCV)	0.07	0.0	0.0
Cannabidivarinic Acid (CBDVA)	0.06	0.0	0.0
Cannabidivarin (CBDV)	0.03	0.0	0.0
Cannabichromenic Acid (CBCA)	0.11	0.0	0.0
Cannabichromene (CBC)	0.13	0.00	0.0
Total Cannabinoids		**1.61**	**16.10**
Total Potential THC**		0.00	0.00
Total Potential CBD**		1.61	16.10

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)

* Total Cannabinoids result reflects the absolute sum of all cannabinoids detected

** Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.

Total THC = THC + (THCa *(0.877)) and Total CBD = CBD + (CBDa *(0.877))

NOTES

N/A

Pesticides

Sample ID	Analyzed	Sample Description	Analysis	Result	Units	Method Code
1904904-004	4/24/2019	Hug_Rasp500_001	Salmonella spp.	Negative	/10g	Salm.1a
	4/24/2019		Listeria spp.	Negative	/10g	List.2
	4/24/2019		Aerobic Plate Count	< 10	CFU/g	APC.1a
	4/24/2019		Totali Coliform Bacteria	< 10	CFU/g	TC.1a
	4/24/2019		Escherichia coli	< 10	CFU/g	EC.1a
	4/24/2019		Yeast and Mold	< 10	CFU/g	Y&M.1a

Metals

*ND: Detected or below reportable threshold
All data in the folowing table is in parts per million (ppm)

Sample	METRC #	Arsenic	Lead	Cadmium	Mercury
295973	00120	ND	ND	ND	ND

Notes: The State of Colorado mandates the following levels for heavy metals: Lead (1 ppm), Arsenic (0.4 ppm), Cadmium (0.4 ppm) and Mercury (0.2 ppm). This testing is for R&D purposed only.

Solvents

Date Lab Test: 06-Jun-2019
Lot Number: IL19051-029

Test	Methodology	Specification	Test Results	Pass/Fail
Residual Pentane	Headspace GC-FID	≤ 500 ppm	< LOQ	Pass
Residual Acetone	Headspace GC-FID	≤ 500 ppm	< LOQ	Pass
Residual Isopropyl Alcohol	Headspace GC-FID	≤ 500 ppm	< LOQ	Pass
Residual Hexane	Headspace GC-FID	≤ 25 ppm	ND	Pass