Certificate of QC Release	Document #:C2008 p2 Version: 002 Effective Date: 06/07/2022	VERTOSA

Certificate of QC Release

Product Information	
Description:	**Cannabinoid Emulsion, Organic 4.1 Formula**
Batch ID:	HTM-O4.1-VWF112001
Manufacturing Location:	California
Date of Manufacture:	December 13, 2024
Expiry Date:	December 13, 2025
QC Release Issue Date:	December 19, 2024

Report	Parameter	Specification		Result	
Internal QC Report	**All**	Pass all specifications		Pass	
3rd Party COA	**Pesticides**	Below Action Limit for All		Pass	
	Heavy Metals	Below Action Limit for All		Pass	
	Residual Solvents	Below Action Limit for All		Pass	
	Mycotoxin	Below Action Limit for All		Pass	
	Potency	Target: 100mg/g		100.6	Pass
		Minimum: 85mg/g	Maximum: 115.mg/g		
	Total Plate Count	Maximum : 1,000 cfu/g		<10 cfu/g	Pass
	Yeast and Mold	Maximum : 100 cfu/g		<10 cfu/g	Pass
	Coliforms	Maximum : 10 cfu/g		<10 cfu/g	Pass
	E. Coli	Maximum 10 cfu/g		<10 cfu/g	Pass
	Salmonella	Absent in 1 g or 1 mL		Negative	Pass

Manufacturing Information	
Quality Events	There are no quality events associated with this product.
Deviations & Investigations	There are no deviations or investigations associated with this product.
Release Decision	Pass

Vertosa INC. certifies that the above information is authentic and accurate.

This product was produced in full compliance under all applicable Regulations and Good Production Practices.

All associated records regarding the processing, packaging and analysis were reviewed and approved for compliance.

All laboratory testing was performed by approved and qualified analytical laboratories.

Completed By: Emmet Bush

Quality Assurance Manager

Certificate of Analysis

ANALYZED BY:

Anresco Laboratories
1375 Van Dyke Avenue,
San Francisco, CA 94124
C8-0000052-LIC

CUSTOMER:

Vertosa Wellness LLC
675 Hegenberger Rd, Suite 120c
Oakland, CA 94621

SAMPLE INFORMATION

Sample No.: 1260188
Product Name: HTM-O4.1-VWF112001
Matrix: Concentrate (Emulsion)

TEST SUMMARY

Cannabinoid Profile:	Tested	**Microbiological Screen:**	Tested
Pesticide Residue Screen:	Pass	**Residual Solvent Screen:**	Pass
Heavy Metal Screen:	Pass	**Mycotoxin Screen:**	Pass

Cannabinoid Profile

11/25/2024

Method: MF-CHEM-15
Instrument: Liquid Chromatography Diode Array Detector (LC-DAD)
Limit of Detection 0.0667 mg/g
Limit of Quantitation 0.2000 mg/g

Cannabinoid	mg/g	%
Δ8-THC	ND	ND
Δ9-THC	100.60	10.060
Δ9-THCA	ND	ND
THCV	0.65	0.065
THCVA	ND	ND
CBD	0.33	0.033
CBDA	ND	ND
CBC	0.46	0.046
CBCA	ND	ND
CBDV	ND	ND
CBG	1.68	0.168
CBGA	ND	ND
CBN	1.13	0.113
Total THC	100.60	10.060
Total CBD	0.33	0.033
Total Cannabinoids	104.85	10.485
Sum of Cannabinoids	104.85	10.485

Total THC = Δ8-THC + Δ9-THC + (0.877 * THCA)
Total CBD = CBD + (0.877 * CBDA)
Total Cannabinoids = Σ (neutral cannabinoids) + [0.877 * Σ (acidic cannabinoids)]

Microbiological Screen

11/27/2024

Analyte	Findings	Units	Method
Standard Plate Count	<10	cfu/g	FDA BAM
Yeast	<10	cfu/g	FDA BAM
Mold	<10	cfu/g	FDA BAM
Coliforms	<10	cfu/g	FDA BAM - ECC AGAR
Escherichia coli	<10	cfu/g	FDA BAM - ECC AGAR
Salmonella	Negative	/1g	MF-MICRO-11 (AOAC 2016.01)

Pesticide Residue Screen Pass

11/25/2024

Method: MF-CHEM-13
Instrument: Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS) & Gas Chromatography Tandem Mass Spectrometry (GC-MS/MS)

Analyte	LOD/LOQ (µg/g)	Findings (µg/g)	Limit (µg/g)	Status
Abamectin	0.04/0.10	ND	0.3	Pass
Acephate	0.02/0.06	ND	5.0	Pass
Acequinocyl	0.04/0.10	ND	4.0	Pass
Acetamiprid	0.017/0.05	ND	5.0	Pass
Aldicarb	0.02/0.06	ND	0.02	Pass

Analyte	LOD/LOQ (µg/g)	Findings (µg/g)	Limit (µg/g)	Status
Azoxystrobin	0.02/0.06	ND	40.0	Pass
Bifenazate	0.02/0.06	ND	5.0	Pass
Bifenthrin	0.04/0.10	ND	0.5	Pass
Boscalid	0.02/0.06	ND	10.0	Pass
Captan	0.2/0.6	ND	5.0	Pass
Carbaryl	0.02/0.06	ND	0.5	Pass
Carbofuran	0.017/0.05	ND	0.017	Pass
Chlorantraniliprole	0.02/0.06	ND	40.0	Pass
Chlordane	0.02/0.06	ND	0.02	Pass
Chlorfenapyr	0.02/0.06	ND	0.02	Pass
Chlorpyrifos	0.02/0.06	ND	0.02	Pass
Clofentezine	0.02/0.06	ND	0.5	Pass
Coumaphos	0.02/0.06	ND	0.02	Pass
Cyfluthrin	0.10/0.30	ND	1.0	Pass
Cypermethrin	0.10/0.30	ND	1.0	Pass
Daminozide	0.017/0.05	ND	0.017	Pass
DDVP (Dichlorvos)	0.013/0.04	ND	0.013	Pass
Diazinon	0.017/0.05	ND	0.2	Pass
Dimethoate	0.017/0.05	ND	0.017	Pass
Dimethomorph	0.017/0.05	ND	20.0	Pass
Ethoprop(hos)	0.02/0.06	ND	0.02	Pass
Etofenprox	0.02/0.06	ND	0.02	Pass
Etoxazole	0.02/0.06	ND	1.5	Pass
Fenhexamid	0.017/0.05	ND	10.0	Pass
Fenoxycarb	0.02/0.06	ND	0.02	Pass
Fenpyroximate	0.02/0.06	ND	2.0	Pass
Fipronil	0.02/0.06	ND	0.02	Pass
Flonicamid	0.02/0.06	ND	2.0	Pass
Fludioxonil	0.02/0.06	ND	30.0	Pass
Hexythiazox	0.02/0.06	ND	2.0	Pass
Imazalil	0.02/0.06	ND	0.02	Pass
Imidacloprid	0.02/0.06	ND	3.0	Pass
Kresoxim Methyl	0.02/0.06	ND	1.0	Pass
Malathion	0.017/0.05	ND	5.0	Pass
Metalaxyl	0.017/0.05	ND	15.0	Pass
Methiocarb	0.02/0.06	ND	0.02	Pass
Methomyl	0.013/0.04	ND	0.1	Pass
Methyl parathion	0.02/0.06	ND	0.02	Pass
Mevinphos	0.02/0.06	ND	0.02	Pass
Myclobutanil	0.02/0.06	ND	9.0	Pass
Naled	0.017/0.05	ND	0.5	Pass
Oxamyl	0.013/0.04	ND	0.2	Pass
Paclobutrazol	0.02/0.06	ND	0.02	Pass
Pentachloronitrobenzene	0.017/0.05	ND	0.2	Pass
Permethrins	0.10/0.30	ND	20.0	Pass
Phosmet	0.02/0.06	ND	0.2	Pass
Piperonyl Butoxide	0.02/0.06	ND	8.0	Pass
Prallethrin	0.04/0.10	ND	0.4	Pass
Propiconazole	0.02/0.06	ND	20.0	Pass
Propoxur	0.013/0.04	ND	0.013	Pass
Pyrethrins	0.15/0.50	ND	1.0	Pass
Pyridaben	0.017/0.05	ND	3.0	Pass
Spinetoram	0.02/0.06	ND	3.0	Pass
Spinosad	0.02/0.06	ND	3.0	Pass
Spiromesifen	0.04/0.10	ND	12.0	Pass
Spirotetramat	0.02/0.06	ND	13.0	Pass
Spiroxamine	0.017/0.05	ND	0.017	Pass
Tebuconazole	0.02/0.06	ND	2.0	Pass
Thiacloprid	0.013/0.04	ND	0.013	Pass
Thiamethoxam	0.02/0.06	ND	4.5	Pass
Trifloxystrobin	0.02/0.06	ND	30.0	Pass

Residual Solvent Screen ✔ Pass

11/25/2024

Method: MF-CHEM-32

Instrument: Gas Chromatography Mass Spectrometry (GC/MS)

Analyte	LOD/LOQ (ppm)	Findings (ppm)	Limit (ppm)	Status
1,2-Dichloroethane	0.5/0.5	ND	1	Pass
Acetone	57/200	ND	5000	Pass
Acetonitrile	56/200	ND	410	Pass
Benzene	0.5/0.5	ND	1	Pass
n-Butane	45/200	ND	5000	Pass
Chloroform	0.5/0.5	ND	1	Pass
Ethanol	37/200	ND	5000	Pass
Ethyl acetate	38/200	ND	5000	Pass
Ethyl ether	37/200	ND	5000	Pass
Ethylene oxide	0.1/0.5	ND	1	Pass
n-Heptane	135/200	ND	5000	Pass
n-Hexane	49/200	ND	290	Pass
Isopropyl alcohol	57/200	ND	5000	Pass
Methanol	37/200	ND	3000	Pass
Methylene chloride	0.1/0.5	ND	1	Pass
n-Pentane	37/200	ND	5000	Pass
Propane	72/200	ND	5000	Pass
Toluene	49/200	ND	890	Pass
Total xylenes (ortho-, meta-, para-)	58/200	ND	2170	Pass
Trichloroethylene	0.5/0.5	ND	1	Pass

Heavy Metal Screen ✔ Pass

11/25/2024

Method: MF-CHEM-16

Instrument: Inductively Coupled Plasma Mass Spectrometry (ICP-MS)

Analyte	LOD/LOQ (µg/g)	Findings (µg/g)	Limit (µg/g)	Status
Arsenic	0.02/0.05	<LOQ	1.5	Pass
Cadmium	0.02/0.05	ND	0.5	Pass
Mercury	0.02/0.05	ND	3	Pass
Lead	0.02/0.125	<LOQ	0.5	Pass

Mycotoxin Screen ✔ Pass

11/25/2024

Method: MF-CHEM-13

Instrument: Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS) & Gas Chromatography Tandem Mass Spectrometry (GC-MS/MS)

Analyte	LOD/LOQ (µg/kg)	Findings (µg/kg)	Limit (µg/kg)	Status
Aflatoxin B1	2/5	ND	-	-
Aflatoxin B2	2/5	ND	-	-
Aflatoxin G1	2/5	ND	-	-
Aflatoxin G2	2/5	ND	-	-
Total Aflatoxins	8/20	ND	20	Pass
Ochratoxin A	6/18	ND	20	Pass

ND = None Detected
LOD = Limit of Detection
LOQ = Limit of Quantitation

Reported by

Vu Lam
Lab Co Director

Scan to verify

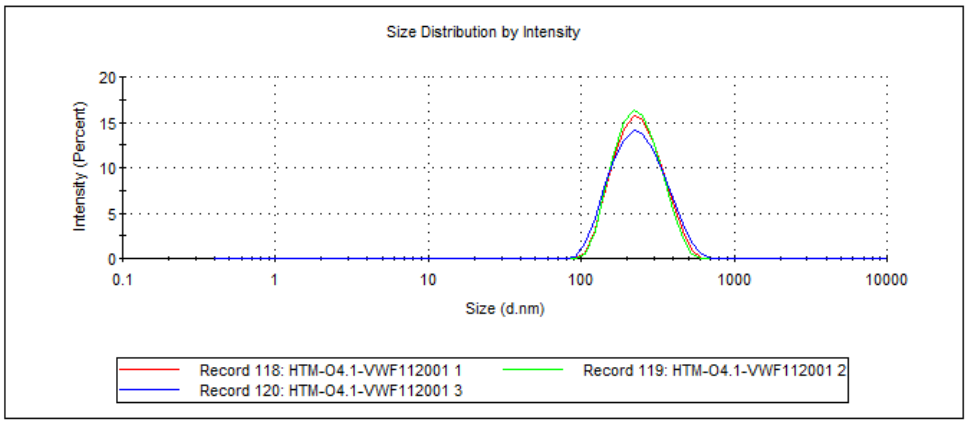
Quality Control Report	Document #:C2008 p1
	Version: 002
	Effective Date: 06/07/2022

Formula Type: Organic 4.1
Date of Manufacture: December 13
QC Report Issue Date: December 19
Active Input: THC
Batch ID: HTM-O4.1-VWF112001

Test	Specification		Result	Pass/Fail
Appearance	Off White, Opaque		Off White, Opaque	Pass
Odor	Mild		Mild	Pass
Foreign Material	None	on 80 mesh filter	None	Pass
	Min Value	**Max Value**		
pH	3.00	3.40	3.13	Pass
Density	0.9800	1.1000	1.0104	Pass
Z-Average (d.nm)	150.0	350.0	218.2	Pass

Emulsion Droplet Sizing Data *(Performed by Dynamic Light Scattering)*

		Size (d.nm):	% Intensity:	St Dev (d.nm):
Z-Average (d.nm): 218.2	Peak 1:	250.5	100.0	97.43
PdI: 0.117	Peak 2:	0.000	0.0	0.000
Intercept: 0.970	Peak 3:	0.000	0.0	0.000
Result quality : Good				



Harold Han, Ph.D., CSO

Completed By: Emmet Bush
Quality Assurance Manager