

Hemp Quality Assurance Testing

CERTIFICATE OF ANALYSIS

DATE ISSUED 12/15/2020

SAMPLE NAME: CHILL

Infused, Non-Inhalable

CULTIVATOR / MANUFACTURER

Business Name: License Number:

Address:

SAMPLE DETAIL

Batch Number: 2-0125C Sample ID: 201210W007

DISTRIBUTOR

Business Name: Tonic CBD

License Number:

Address: 2466 Pennsylvania Ave

Sayre PA 18840

Date Collected: 12/10/2020 Date Received: 12/10/2020

Batch Size:

Sample Size: 1.0 units

Unit Mass: 30 milliliters per Unit

Serving Size:







Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: 40.050 mg/unit

Total CBD: 808.680 mg/unit

Sum of Cannabinoids: 881.940 mg/unit

Total Cannabinoids: 881.940 mg/unit

Total THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during the decarboxylation step: Total THC = Δ 9THC + (THCa (0.877))

Total CBD = CBD + (CBDa (0.877))

Sum of Cannabinoids = Δ 9THC + THCa + CBD + CBDa + CBG + CBGa + THCV + THCVa + CBC + CBCa + CBDV + CBDVa + Δ 8THC + CBL + CBN

Total Cannabinoids = (Δ9THC+0.877*THCa) + (CBD+0.877*CBDa) + (CBG+0.877*CBGa) + (THCV+0.877*THCVa) + (CBC+0.877*CBCa) +

(CBDV+0.877*CBDVa) + Δ8THC + CBL + CBN

Moisture: NT

Density: 0.9868 g/mL

Viscosity: NT

SAFETY ANALYSIS - SUMMARY

∆9THC per Unit: **⊘PASS**

Foreign Material: NT

Water Activity: NT

Vitamin E Acetate: NT

Pesticides: NT

Mycotoxins: NT

Residual Solvents: PASS

Heavy Metals: NT

Microbial Impurities (PCR): PASS

Microbial Impurities (Plating): NT

For quality assurance purposes. Not a Pre-Harvest Hemp Lab Test Report. These results relate only to the sample included on this report. This report shall not be reproduced, except in full, without written

Sample Certification: California Code of Regulations Title 16 Effect Date January 16, 2019. Authority: Section 26013, Business and Professions Code. Reference: Sections 26100, 26104 and 26110, Business and Professions Code.

Decision Rule: Statements of conformity (e.g. Pass/Fail) to specifications are made in this report without taking measurement uncertainty into account. Where statements of conformity are made in this report, the following decision rules are applied: PASS - Results within limits/specifications, FAIL - Results exceed limits/specifications.

References: limit of detection (LOD), limit of quantification (LOQ), not detected (ND), not tested (NT)

W-H NUES LQC verified by: Jackson Waite-Himm Date: 12/15/2020 elwrigApproved by: Josh Wurzer, President Date: 12/15/2020



Hemp Quality Assurance Testing

CERTIFICATE OF ANALYSIS

CHILL | DATE ISSUED 12/15/2020



Tested by high-performance liquid chromatography with diode-array detection (HPLC-DAD).

Method: QSP 1157 - Analysis of Cannabinoids by HPLC-DAD

TOTAL THC: 40.050 mg/unit

Total THC (Δ9THC+0.877*THCa)

TOTAL CBD: 808.680 mg/unit

Total CBD (CBD+0.877*CBDa)

TOTAL CANNABINOIDS: 881.940 mg/unit

Total Cannabinoids (Total THC) + (Total CBD) + (Total CBG) + (Total THCV) + (Total CBC) + (Total CBDV) + Δ 8THC + CBL + CBN

TOTAL CBG: ND

Total CBG (CBG+0.877*CBGa)

TOTAL THCV: ND

Total THCV (THCV+0.877*THCVa)

TOTAL CBC: 27.300 mg/unit

Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: 4.050 mg/unit

Total CBDV (CBDV+0.877*CBDVa)

CANNABINOID TEST RESULTS - 12/15/2020

	COMPOUND	LOD/LOQ (mg/mL)	MEASUREMENT UNCERTAINTY (mg/mL)	RESULT (mg/mL)	RESULT (%)
	CBD	0.004 / 0.011	±1.2912	26.956	2.7317
	Δ9ΤΗС	0.002 / 0.005	±0.0941	1.335	0.1353
	СВС	0.003 / 0.010	±0.0377	0.910	0.0922
	CBDV	0.002 / 0.007	±0.0071	0.135	0.0137
	CBN	0.001 / 0.004	±0.0013	0.034	0.0034
	CBL	0.003 / 0.008	±0.0013	0.028	0.0028
	Δ8ΤΗC	0.01 / 0.02	N/A	ND	ND
	THCa	0.001 / 0.002	N/A	ND	ND
	THCV	0.002 / 0.008	N/A	ND	ND
	THCVa	0.002 / 0.005	N/A	ND	ND
	CBDa	0.001 / 0.003	N/A	ND	ND
	CBDVa	0.001 / 0.003	N/A	ND	ND
	CBG	0.002 / 0.005	N/A	ND	ND
	CBGa	0.002 / 0.006	N/A	ND	ND
	CBCa	0.001 / 0.004	N/A	ND	ND
_	SUM OF CANNABINOIDS			29.398 mg/mL	2.9791%

Unit Mass: 30 milliliters per Unit

Δ9THC per Unit	1100 per-package limit	40.050 mg/unit	PASS
Total THC per Unit		40.050 mg/unit	
CBD per Unit		808.680 mg/unit	
Total CBD per Unit		808.680 mg/unit	
Sum of Cannabinoids per Unit		881.940 mg/unit	
Total Cannabinoids per Unit		881.940 mg/unit	

MOISTURE TEST RESULT	DENSITY TEST RESULT	VISCOSITY TEST RESULT
Not Tested	0.9868 g/mL	Not Tested
	Tested 12/15/2020	
	Method: QSP 7870 - Sample Preparation	





CERTIFICATE OF ANALYSIS

CHILL | DATE ISSUED 12/15/2020





Residual Solvents Analysis

CATEGORY 1 AND 2 RESIDUAL SOLVENTS

Residual Solvent analysis utilizing gas chromatography-mass spectrometry (GC-MS).

Method: QSP 1204 - Analysis of Residual Solvents by GC-MS

CATEGORY 1 RESIDUAL SOLVENTS TEST RESULTS - 12/12/2020 PASS

COMPOUND	•	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (μg/g)	RESULT
1,2-Dichloroe	ethane	0.05 / 0.1	1	N/A	ND	PASS
Benzene		0.03 / 0.09	1	N/A	ND	PASS
Chloroform		0.1/0.2	1	N/A	ND	PASS
Ethylene Oxi	de	0.1/0.4	1	N/A	ND	PASS
Methylene ch	loride	0.3/0.9	1	N/A	ND	PASS
Trichloroethy	lene	0.1 / 0.3	1	N/A	ND	PASS

CATEGORY 2 RESIDUAL SOLVENTS TEST RESULTS - 12/12/2020 PASS

Acetone	20/50	5000	N/A	ND	PASS
Acetonitrile	2/7	410	N/A	ND	PASS
Butane	10/50	5000	N/A	ND	PASS
Ethanol	20/50	5000	N/A	<loq< th=""><th>PASS</th></loq<>	PASS
Ethyl acetate	20/60	5000	N/A	ND	PASS
Ethyl ether	20 / 50	5000	N/A	ND	PASS
Heptane	20/60	5000	N/A	ND	PASS
Hexane	2/5	290	N/A	ND	PASS
Isopropyl Alcohol	10 / 40	5000	N/A	ND	PASS
Methanol	50/200	3000	N/A	ND	PASS
Pentane	20/50	5000	N/A	ND	PASS
Propane	10/20	5000	N/A	ND	PASS
Toluene	7/21	890	N/A	ND	PASS
Total Xylenes	50 / 160	2170	N/A	ND	PASS



Microbial Impurities Analysis

PCR AND PLATING

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbial impurities.

Method: QSP 1221 - Analysis of Microbial Impurities

MICROBIAL IMPURITIES TEST RESULTS (PCR) - 12/12/2020 PASS

COMPOUND	ACTION LIMIT	RESULT	RESULT	
Shiga toxin-producing Escherichia coli	Detect	ND	PASS	
Salmonella spp.	Detect	ND	PASS	
Aspergillus fumigatus		NT		
Aspergillus flavus		NT		
Aspergillus niger		NT		
Aspergillus terreus		NT		

Analysis conducted by $3M^{TM}$ Petrifilm and plate counts of microbial impurities.

 $\textbf{Method:} \ \mathsf{QSP} \ \mathsf{6794} \ \mathsf{-} \ \mathsf{Plating} \ \mathsf{with} \ \mathsf{3M}^{\mathsf{TM}} \ \mathsf{Petrifilm}^{\mathsf{TM}}$



MICROBIAL IMPURITIES TEST RESULTS (PLATING)

COMPOUND	RESULT (cfu/g)
Aerobic Plate Count	NT
Total Yeast and Mold	NT