

Hemp Quality Assurance Testing

CERTIFICATE OF ANALYSIS

DATE ISSUED 01/07/2021

SAMPLE NAME: Twin Arch Tincture

Infused, Non-Inhalable

CULTIVATOR / MANUFACTURER

Business Name: License Number:

Address:

SAMPLE DETAIL

Batch Number: TAT-001-1200 Sample ID: 210105S003

DISTRIBUTOR / TESTED FOR

Business Name: Bardo License Number: Address:

Date Collected: 01/05/2021 Date Received: 01/05/2021

Batch Size:

Sample Size: 3.0 units

Unit Mass: 30 milliliters per Unit

Serving Size:







Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: 26.520 mg/unit

Total CBD: 1326.900 mg/unit

Total Cannabinoids: 1440.030 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 +

Sum of Cannabinoids: 1440.030 mg/unit^{THCV} + THCVa + CBC + CBCa + CBDV + CBDVa + Δ8THC + 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: 0.9488 g/mL

Viscosity: NT

SAFETY ANALYSIS - SUMMARY

∆9THC per Unit: **⊘PASS**

Foreign Material: NT

Water Activity: NT

Vitamin E Acetate: NT

Pesticides: NT

Mvcotoxins: NT

Residual Solvents: NT

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)



Hemp Quality Assurance Testing

CERTIFICATE OF ANALYSIS

TWIN ARCH TINCTURE | DATE ISSUED 01/07/2021

Cannabinoid Analysis

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

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

TOTAL THC: 26.520 mg/unit Total THC (Δ9THC+0.877*THCa)

TOTAL CBD: 1326.900 mg/unit

Total CBD (CBD+0.877*CBDa)

TOTAL CANNABINOIDS: 1440.030 mg/unit

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

TOTAL CBG: 14.940 mg/unit

Total CBG (CBG+0.877*CBGa)

TOTAL THCV: ND

Total THCV (THCV+0.877*THCVa)

TOTAL CBC: 54.690 mg/unit

Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: 7.320 mg/unit
Total CBDV (CBDV+0.877*CBDVa)

CANNABINOID TEST RESULTS - 01/06/2021

	COMPOUND	LOD/LOQ (mg/mL)	MEASUREMENT UNCERTAINTY (mg/mL)	RESULT (mg/mL)	RESULT (%)
nit-	CBD	0.004 / 0.011	±2.1186	44.230	4.6617
	СВС	0.003 / 0.010	±0.0755	1.823	0.1921
	Δ9ΤΗС	0.002/0.014	±0.0623	0.884	0.0932
	CBG	0.002 / 0.006	±0.0310	0.498	0.0525
	CBDV	0.002/0.012	±0.0128	0.244	0.0257
	CBN	0.001 / 0.007	±0.0085	0.229	0.0241
	CBL	0.003 / 0.010	±0.0044	0.093	0.0098
	Δ8ΤΗC	0.01 / 0.02	N/A	ND	ND
	THCa	0.001 / 0.005	N/A	ND	ND
	THCV	0.002/0.012	N/A	ND	ND
	THCVa	0.002 / 0.019	N/A	ND	ND
	CBDa	0.001 / 0.026	N/A	ND	ND
	CBDVa	0.001 / 0.018	N/A	ND	ND
	CBGa	0.002 / 0.007	N/A	ND	ND
	CBCa	0.001 / 0.015	N/A	ND	ND
_	SUM OF CANNABINOIDS			48.001 mg/mL	5.0591%

Unit Mass: 30 milliliters per Unit

Δ9THC per Unit	1100 per-package limit	26.520 mg/unit	PASS
Total THC per Unit		26.520 mg/unit	
CBD per Unit		1326.900 mg/unit	
Total CBD per Unit		1326.900 mg/unit	
Sum of Cannabinoids per Unit		1440.030 mg/unit	
Total Cannabinoids per Unit		1440.030 mg/unit	

MOISTURE TEST RESULT	DENSITY TEST RESULT	VISCOSITY TEST RESULT
Not Tested	0.9488 g/mL	Not Tested
	Tested 01/06/2021	
	Method: QSP 7870 - Sample Preparation	





Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

TWIN ARCH TINCTURE | DATE ISSUED 01/07/2021



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

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

Method: QSP 6794 - Plating with $3M^{TM}$ PetrifilmTM

MICROBIAL IMPURITIES TEST RESULTS (PCR) - 01/07/2021 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	

MICROBIAL IMPURITIES TEST RESULTS (PLATING)

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

