

# Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

DATE ISSUED 05/13/2025

#### SAMPLE DETAILS

**SAMPLE NAME: Highbernate Tonic** 

Beverage, Liquid Edible

**CULTIVATOR / MANUFACTURER** 

Business Name: License Number:

Address:

SAMPLE DETAIL

**Batch Number:** 042526 **Sample ID:** 250429M026

**DISTRIBUTOR / TESTED FOR** 

**Business Name: BZ Sciences** 

License Number:

Address:

**Date Collected:** 04/29/2025 **Date Received:** 04/29/2025

Batch Size:

Sample Size: 1.0 units

Unit Mass: 355 milliliters per Unit

Serving Size: 177.5 milliliters per Serving







Scan QR code to verify authenticity of results.

## **CANNABINOID ANALYSIS - SUMMARY**

Total THC: 9.4430 mg/unit

Total CBD: <LOQ

Sum of Cannabinoids: 27.7965 mg/unit

Total Cannabinoids: 27.7965 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 =  $\Delta^9\text{-THC}$  + (THCa (0.877)) Total CBD = CBD + (CBDa (0.877))

Sum of Cannabinoids =  $\Delta^9$ -THC + THCa + CBD + CBDa + CBG + CBGa + THCV + THCVa + CBC + CBCa + CBDV + CBDVa +  $\Delta^8$ -THC + CBL + CBN Total Cannabinoids = ( $\Delta^9$ -THC+0.877\*THCa) + (CBD+0.877\*CBDa) + (CBG+0.877\*CBGa) + (THCV+0.877\*THCVa) + (CBC+0.877\*CBCa) +

(CBDV+0.877\*CBDVa) +  $\Delta$ 8-THC + CBL + CBN

Density: 1.0173 g/mL

#### **SAFETY ANALYSIS - SUMMARY**

Δ<sup>9</sup>-THC per Unit: ⊘PASS Pesticides: ⊘PASS Mycotoxins: ⊘PASS Heavy Metals: ⊘PASS

For quality assurance purposes. Not a Regulatory 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 approval of the laboratory.

Sample Certification: California Code of Regulations Title 4 Division 19. Department of Cannabis Control 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.

 $\label{eq:References: limit of detection (LOD), limit of quantification (LOQ), not detected (ND), not tested (NT), $\mu g/g = ppm, $\mu g/kg = ppb$$ 

Approved by: Josh Wurzer
Job Title: Chief Compliance Officer
Date: 05/13/2025

Amendment to Certificate of Analysis 250429M026-002



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## 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: 9.4430 mg/unit

Total THC (Δ<sup>9</sup>-THC+0.877\*THCa)

TOTAL CBD: <LOQ
Total CBD (CBD+0.877\*CBDa)

TOTAL CANNABINOIDS: 27.7965 mg/unit

$$\label{eq:total_constraint} \begin{split} & Total \ Cannabinoids \ (Total \ THC) + (Total \ CBD) + (Total \ CBC) + (Total \ CBC) + (Total \ CBDV) + \Delta^8 - THC + CBL + CBN \end{split}$$

TOTAL CBG: ND

Total CBG (CBG+0.877\*CBGa)

**TOTAL THCV: ND** 

Total THCV (THCV+0.877\*THCVa)

TOTAL CBC: ND

Total CBC (CBC+0.877\*CBCa)

TOTAL CBDV: ND

Total CBDV (CBDV+0.877\*CBDVa)

#### **CANNABINOID TEST RESULTS - 05/02/2025**

COMPOUND	LOD/LOQ (mg/mL)	MEASUREMENT UNCERTAINTY (mg/mL)	RESULT (mg/mL)	RESULT (%)
CBN	0.0001 / 0.0005	±0.00148	0.0517	0.00508
Δ <sup>9</sup> -THC	0.0001 / 0.0011	±0.00146	0.0266	0.00261
CBD	0.0003 / 0.0008	N/A	<loq< th=""><th><loq< th=""></loq<></th></loq<>	<loq< th=""></loq<>
$\Delta^8$ -THC	0.0006 / 0.0015	N/A	ND	ND
THCa	0.0001 / 0.0004	N/A	ND	ND
THCV	0.0002 / 0.0009	N/A	ND	ND
THCVa	0.0001/0.0014	N/A	ND	ND
CBDa	0.0001 / 0.0020	N/A	ND	ND
CBDV	0.0002 / 0.0009	N/A	ND	ND
CBDVa	0.0001/0.0014	N/A	ND	ND
CBG	0.0001 / 0.0005	N/A	ND	ND
CBGa	0.0001 / 0.0005	N/A	ND	ND
CBL	0.0002 / 0.0008	N/A	ND	ND
СВС	0.0003 / 0.0008	N/A	ND	ND
CBCa	0.0001/0.0011	N/A	ND	ND
SUM OF CANN	ABINOIDS		0.0783 mg/mL	0.0077%

### Unit Mass: 355 milliliters per Unit / Serving Size: 177.5 milliliters per Serving

$\Delta^9$ -THC per Unit	110 per-package limit	9.4430 mg/unit	PASS	
$\Delta^9$ -THC per Serving	4.7215 mg/serving			
Total THC per Unit	9.4430 mg/unit			
Total THC per Serving	4.7215 mg/serving			
CBD per Unit		<loq< th=""><th></th></loq<>		
CBD per Serving	<loq< th=""><th></th></loq<>			
Total CBD per Unit	<loq< th=""><th></th></loq<>			
Total CBD per Serving	<loq< th=""><th></th></loq<>			
Sum of Cannabinoids per Unit	27.7965 mg/unit			
Sum of Cannabinoids per Serving	ving 13.8983 mg/serving			
Total Cannabinoids per Unit	27.7965 mg/unit			
Total Cannabinoids per Serving	13.8983 mg/serving			

#### **DENSITY TEST RESULT**

1.0173 g/mL

Tested 05/02/2025

**Method:** QSP 7870 - Sample Preparation



## Hemp Quality Assurance Testing CERTIFICATE OF ANALYSIS

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## **Pesticide Analysis**

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS).

\*GC-MS utilized where indicated.

**Method:** QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS or QSP 1213 - Analysis of Pesticides by GC-MS

## PESTICIDE TEST RESULTS - 05/04/2025 PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (μg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (μg/g)	RESULT
Abamectin	0.03 / 0.10	0.3	N/A	ND	PASS
Acephate	0.02 / 0.07	5	N/A	ND	PASS
Acequinocyl	0.02 / 0.07	4	N/A	ND	PASS
Acetamiprid	0.02 / 0.05	5	N/A	ND	PASS
Aldicarb	0.03 / 0.08	≥LOD	N/A	ND	PASS
Azoxystrobin	0.02 / 0.07	40	N/A	ND	PASS
Bifenazate	0.01 / 0.04	5	N/A	ND	PASS
Bifenthrin	0.02 / 0.05	0.5	N/A	ND	PASS
Boscalid	0.03 / 0.09	10	N/A	ND	PASS
Captan	0.19/0.57	5	N/A	ND	PASS
Carbaryl	0.02 / 0.06	0.5	N/A	ND	PASS
Carbofuran	0.02 / 0.05	≥LOD	N/A	ND	PASS
Chlorantraniliprole	0.04 / 0.12	40	N/A	ND	PASS
Chlordane*	0.03 / 0.08	≥LOD	N/A	ND	PASS
Chlorfenapyr*	0.03 / 0.10	≥LOD	N/A	ND	PASS
Chlorpyrifos	0.02 / 0.06	≥LOD	N/A	ND	PASS
Clofentezine	0.03 / 0.09	0.5	N/A	ND	PASS
Coumaphos	0.02 / 0.07	≥LOD	N/A	ND	PASS
Cyfluthrin	0.12 / 0.38	1	N/A	ND	PASS
Cypermethrin	0.11/0.32	1	N/A	ND	PASS
Daminozide	0.02 / 0.07	≥LOD	N/A	ND	PASS
Diazinon	0.02 / 0.05	0.2	N/A	ND	PASS
Dichlorvos (DDVP)	0.03 / 0.09	≥LOD	N/A	ND	PASS
Dimethoate	0.03/0.08	≥LOD	N/A	ND	PASS
Dimethomorph	0.03/0.09	20	N/A	ND	PASS
Ethoprophos	0.03 / 0.10	≥LOD	N/A	ND	PASS
Etofenprox	0.02 / 0.06	≥LOD	N/A	ND	PASS
Etoxazole	0.02 / 0.06	1.5	N/A	ND	PASS
Fenhexamid	0.03 / 0.09	10	N/A	ND	PASS
Fenoxycarb	0.03 / 0.08	≥LOD	N/A	ND	PASS
Fenpyroximate	0.02 / 0.06	2	N/A	ND	PASS
Fipronil	0.03 / 0.08	≥LOD	N/A	ND	PASS
Flonicamid	0.03 / 0.10	2	N/A	ND	PASS
Fludioxonil	0.03 / 0.10	30	N/A	ND	PASS
Hexythiazox	0.02 / 0.07	2	N/A	ND	PASS
lmazalil	0.02 / 0.06	≥LOD	N/A	ND	PASS
Imidacloprid	0.04 / 0.11	3	N/A	ND	PASS
Kresoxim-methyl	0.02 / 0.07	1	N/A	ND	PASS
Malathion	0.03 / 0.09	5	N/A	ND	PASS
Metalaxyl	0.02 / 0.07	15	N/A	ND	PASS
Methiocarb	0.02 / 0.07	≥LOD	N/A	ND	PASS

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## Pesticide Analysis Continued

## PESTICIDE TEST RESULTS - 05/04/2025 continued **⊘** PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
Methomyl	0.03 / 0.10	0.1	N/A	ND	PASS
Mevinphos	0.03/0.09	≥LOD	N/A	ND	PASS
Myclobutanil	0.03 / 0.09	9	N/A	ND	PASS
Naled	0.02 / 0.07	0.5	N/A	ND	PASS
Oxamyl	0.04 / 0.11	0.2	N/A	ND	PASS
Paclobutrazol	0.02 / 0.05	≥LOD	N/A	ND	PASS
Parathion-methyl	0.03 / 0.10	≥LOD	N/A	ND	PASS
Pentachloronitro- benzene (Quintozene)*	0.03 / 0.09	0.2	N/A	ND	PASS
Permethrin	0.04 / 0.12	20	N/A	ND	PASS
Phosmet	0.03 / 0.10	0.2	N/A	ND	PASS
Piperonyl Butoxide	0.02 / 0.07	8	N/A	ND	PASS
Prallethrin	0.03 / 0.08	0.4	N/A	ND	PASS
Propiconazole	0.02 / 0.07	20	N/A	ND	PASS
Propoxur	0.03 / 0.09	≥LOD	N/A	ND	PASS
Pyrethrins	0.04 / 0.12	1	N/A	ND	PASS
Pyridaben	0.02 / 0.07	3	N/A	ND	PASS
Spinetoram	0.02 / 0.07	3	N/A	ND	PASS
Spinosad	0.02 / 0.07	3	N/A	ND	PASS
Spiromesifen	0.02 / 0.05	12	N/A	ND	PASS
Spirotetramat	0.02 / 0.06	13	N/A	ND	PASS
Spiroxamine	0.03 / 0.08	≥ LOD	N/A	ND	PASS
Tebuconazole	0.02 / 0.07	2	N/A	ND	PASS
Thiacloprid	0.03 / 0.1 <mark>0</mark>	≥LOD	N/A	ND	PASS
Thiamethoxam	0.03/0.10	4.5	N/A	ND	PASS
Trifloxystrobin	0.03/0.08	30	N/A	ND	PASS



## Mycotoxin Analysis

Mycotoxin analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS).

**Method:** QSP 1212 - Analysis of Pesticides and Mycotoxins by I.C.MS

## MYCOTOXIN TEST RESULTS - 05/04/2025 PASS

COMPOUND	LOD/LOQ (µg/kg)	ACTION LIMIT (µg/kg)	MEASUREMENT UNCERTAINTY (μg/kg)	RESULT (µg/kg)	RESULT
Aflatoxin B1	2.0 / 6.0		N/A	ND	
Aflatoxin B2	1.8 / 5.6		N/A	ND	
Aflatoxin G1	1.0 / 3.1		N/A	ND	
Aflatoxin G2	1.2 / 3.5		N/A	ND	
Ochratoxin A	6.3 / 19.2	20	N/A	ND	PASS
Total Aflatoxin		20		ND	PASS



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## **Heavy Metals Analysis**

leavy metal analysis utilizing inductively COMPOUND LOD/LOQ

Heavy metal analysis utilizing inductively coupled plasma-mass spectrometry (ICP-MS).

Method: QSP 1160 - Analysis of Heavy Metals by ICP-MS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (μg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (μg/g)	RESULT
Arsenic	0.02 / 0.1	1.5	N/A	ND	PASS
Cadmium	0.02 / 0.05	0.5	N/A	ND	PASS
Lead	0.04 / 0.1	0.5	N/A	ND	PASS
Mercury	0.002 / 0.01	3	N/A	ND	PASS

**HEAVY METALS TEST RESULTS** - 05/05/2025 **⊘ PASS** 

#### NOTES

Reason for Amendment: Order Detail Information Change Sample serving mass provided by client. Sample unit mass provided by