

Prepared for:
Oliphant Brewing LLC

350 Main St, Ste 2
Somerset, WI USA 54025

Tropical Tiki Twist 032824

Batch ID or Lot Number: 032824	Test: Potency	Reported: 05Apr2024	USDA License: N/A
Matrix: Unit	Test ID: T000275952	Started: 04Apr2024	Sampler ID: N/A
	Method(s): TM14 (HPLC-DAD)	Received: 02Apr2024	Status: N/A

Cannabinoids

	LOD (mg)	LOQ (mg)	Result (mg)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.166	0.459	ND	ND	# of Servings = 1, Sample Weight=381g
Cannabichromenic Acid (CBCA)	0.152	0.419	ND	ND	
Cannabidiol (CBD)	0.451	1.346	ND	ND	
Cannabidiolic Acid (CBDA)	0.462	1.381	ND	ND	
Cannabidivarin (CBDV)	0.107	0.318	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.193	0.576	ND	ND	
Cannabigerol (CBG)	0.094	0.260	ND	ND	
Cannabigerolic Acid (CBGA)	0.394	1.088	ND	ND	
Cannabinol (CBN)	0.123	0.340	ND	ND	
Cannabinolic Acid (CBNA)	0.269	0.743	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.470	1.297	<LOQ	<LOQ	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.427	1.178	11.080	0.00	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.378	1.043	ND	ND	
Tetrahydrocannabivarin (THCV)	0.086	0.237	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.333	0.920	ND	ND	
Total Cannabinoids			11.080	0.00	
Total Potential THC			11.080	0.00	
Total Potential CBD			ND	ND	

Final Approval



Karen Winternheimer
05Apr2024
01:48:00 PM MDT

PREPARED BY / DATE



Phillip Travisano
05Apr2024
01:49:00 PM MDT

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/c5be0498-8aef-4b66-9c33-220b3222c0f1>

Definitions

% = % (w/w) = Percent (weight of analyte / weight of product). ND = None Detected (defined by dynamic range of the method). Total Potential Delta 9-THC or CBD is calculated to take into account the loss of a carboxyl group during decarboxylation step, using the following formulas: Total Potential Delta 9-THC = Delta 9-THC + (Delta 9-THCa *(0.877)) and Total CBD = CBD + (CBDa *(0.877)).

Testing results are based solely upon the sample submitted to SC Laboratories, Inc., in the condition it was received. SC Laboratories, Inc., warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of SC Laboratories, Inc. ISO/IEC 17025:2017 A2LA Cert #: 4329.02 Chemical; 4329.03 Biological.



Cert #4329.02
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Prepared for:

SUPERIOR MOLECULAR LLC

4459 WHITE BEAR PKWY

WHITE BEAR LAKE, MN USA 55110

Full Panel WS Jan-Feb 2024 (CBD, CBN, CBG,D9)

Batch ID or Lot Number: FP.WS.020124	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 1 of 4
Reported: 05Feb2024	Started: 02Feb2024	Received: 02Feb2024	


Residual Solvents

Test ID: T000269758


Methods: TM04 (GC-MS): Residual

Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	95 - 1899	ND	
Butanes (Isobutane, n-Butane)	173 - 3467	ND	
Methanol	65 - 1291	ND	
Pentane	94 - 1871	ND	
Ethanol	93 - 1869	ND	
Acetone	103 - 2052	ND	
Isopropyl Alcohol	105 - 2096	ND	
Hexane	6 - 130	ND	
Ethyl Acetate	103 - 2066	ND	
Benzene	0.2 - 4.2	ND	
Heptanes	99 - 1980	ND	
Toluene	18 - 366	ND	
Xylenes (m,p,o-Xylenes)	124 - 2489	ND	

Final Approval


PREPARED BY / DATE

Sam Smith
05Feb2024
11:41:00 AM MST


APPROVED BY / DATE

Karen Winternheimer
05Feb2024
11:41:00 AM MST

Prepared for:
SUPERIOR MOLECULAR LLC

4459 WHITE BEAR PKWY
WHITE BEAR LAKE, MN USA 55110

Full Panel WS Jan-Feb 2024 (CBD, CBN, CBG,D9)

Batch ID or Lot Number: FP.WS.020124	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 2 of 4
Reported: 05Feb2024	Started: 02Feb2024	Received: 02Feb2024	

Microbial Contaminants

Test ID: T000269756

Methods: TM25 (PCR) TM24, TM26, TM27 (Culture Plating)

	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 ² CFU/g	1.0x10 ³ - 1.5x10 ⁵	1.0x10 ⁵ CFU/g	
Total Coliforms*	TM27: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	

Final Approval

	Eden Thompson-Wright 05Feb2024 03:03:00 PM MST		Brianne Maillot 05Feb2024 03:32:00 PM MST
PREPARED BY / DATE		APPROVED BY / DATE	

Heavy Metals

Test ID: T000269757

Methods: TM19 (ICP-MS): Heavy

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.05 - 4.69	ND	
Cadmium	0.04 - 4.48	ND	
Mercury	0.05 - 4.78	ND	
Lead	0.05 - 4.75	ND	

Final Approval

	Sam Smith 06Feb2024 04:47:00 PM MST		Karen Winternheimer 07Feb2024 11:12:00 AM MST
PREPARED BY / DATE		APPROVED BY / DATE	

Prepared for:
SUPERIOR MOLECULAR LLC

4459 WHITE BEAR PKWY
WHITE BEAR LAKE, MN USA 55110

Full Panel WS Jan-Feb 2024 (CBD, CBN, CBG,D9)

Batch ID or Lot Number: FP.WS.020124	Test, Test ID and Methods: Various	Matrix: Concentrate	Page 3 of 4
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Pesticides


Test ID: T000269755

Methods: TM17

(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)		Dynamic Range (ppb)	Result (ppb)	
Abamectin	322 - 2692	ND		Malathion	300 - 2685	ND
Acephate	40 - 2713	ND		Metalaxyl	43 - 2693	ND
Acetamiprid	42 - 2711	ND		Methiocarb	42 - 2675	ND
Azoxystrobin	46 - 2680	ND		Methomyl	41 - 2765	ND
Bifenazate	43 - 2700	ND		MGK 264 1	145 - 1627	ND
Boscalid	47 - 2707	ND		MGK 264 2	110 - 1097	ND
Carbaryl	42 - 2691	ND		Myclobutanil	50 - 2631	ND
Carbofuran	42 - 2677	ND		Naled	44 - 2668	ND
Chlorantraniliprole	48 - 2651	ND		Oxamyl	41 - 2770	ND
Chlorpyrifos	48 - 2744	ND		Paclobutrazol	45 - 2671	ND
Clofentezine	282 - 2731	ND		Permethrin	300 - 2757	ND
Diazinon	293 - 2717	ND		Phosmet	42 - 2585	ND
Dichlorvos	286 - 2745	ND		Prophos	289 - 2668	ND
Dimethoate	41 - 2702	ND		Propoxur	41 - 2692	ND
E-Fenpyroximate	222 - 2857	ND		Pyridaben	286 - 2731	ND
Etofenprox	44 - 2759	ND		Spinosad A	34 - 2091	ND
Etoxazole	292 - 2664	ND		Spinosad D	67 - 674	ND
Fenoxycarb	41 - 2669	ND		Spiromesifen	273 - 2744	ND
Fipronil	50 - 2773	ND		Spirotetramat	300 - 2772	ND
Flonicamid	41 - 2768	ND		Spiroxamine 1	16 - 1015	ND
Fludioxonil	278 - 2672	ND		Spiroxamine 2	22 - 1572	ND
Hexythiazox	42 - 2774	ND		Tebuconazole	290 - 2684	ND
Imazalil	278 - 2725	ND		Thiacloprid	42 - 2720	ND
Imidacloprid	40 - 2726	ND		Thiamethoxam	42 - 2744	ND
Kresoxim-methyl	43 - 2742	ND		Trifloxystrobin	44 - 2700	ND

Final Approval


 Karen Winternheimer
 07Feb2024
 08:52:00 AM MST
 PREPARED BY / DATE


 Sam Smith
 07Feb2024
 08:55:00 AM MST
 APPROVED BY / DATE

Prepared for:

SUPERIOR MOLECULAR LLC

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Full Panel WS Jan-Feb 2024 (CBD, CBN, CBG,D9)

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<https://results.botanacor.com/api/v1/coas/uuid/f7ba33d5-94d6-4fc7-8f2c-46d528325346>

Definitions

LOD = Limit of Detection, ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation, PPB = Parts per Billion, % = % (w/w) = Percent (weight of analyte / weight of product). ND = None Detected (defined by dynamic range of the method). Total Potential Delta 9-THC or CBD is calculated to take into account the loss of a carboxyl group during decarboxylation step, using the following formulas: Total Potential Delta 9-THC = Delta 9-THC + (Delta 9-THCa * (0.877)) and Total CBD = CBD + (CBDa * (0.877)). Fail equates to a concentration level of Delta 9-THC, on a dry weight basis, higher than 0.3 percent + or - the measurement uncertainty. Total Potential THC 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)). ALOQ = Above Limit Of Quantitation (defined by dynamic range of the method), CFU/g = Colony Forming Units per Gram. Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form. Examples: 10^2 = 100 CFU, 10^3 = 1,000 CFU, 10^4 = 10,000 CFU, 10^5 = 100,000 CFU.

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