

MB1: Microbiological Contaminants [WI-10-09]

Analyst: MM Test Dat

Test Date: 9/15/2021

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

97522-MB1

Symbol	Analysis	Results	Units	Limits*	Status
AC	Total Aerobic Bacterial Count	<100	CFU/g	100,000 CFU/g	PASS
CC	Total Coliform Bacterial Count	<100	CFU/g	1,000 CFU/g	PASS
EB	Total Bile Tolerant Gram Negative Count	<100	CFU/g	1,000 CFU/g	PASS
YM	Total Yeast & Mold	<100	CFU/g	10,000 CFU/g	PASS

Recommended limits established by the American Herbal Pharmacopoeia (AHP) monograph for Cannabis Inflorescence [2013], for consumable botanical products, including processed and unprocessed cannabis materials, and solvent-based extracts. Note: All recorded Microbiological tests are within the established limits.

END OF REPORT



HM: Heavy Metal Analysis [WI-10-13]

Analyst: CJS

Test Date: 8/10/2021

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

96427-HM

				Use Lim	1ts ² (µg/kg)	
Symbol	Metal	Conc. ¹ (μ g/kg)	RL	All	Ingestion	Status
As	Arsenic	247	50.0	200	1,500	PASS
Cd	Cadmium	ND	50.0	200	500	PASS
Hg	Mercury	ND	50.0	100	1,500	PASS
Pb	Lead	100	50.0	500	1,000	PASS

1) ND = None detected above the indicated Reporting Limit (RL)

2) MA Dept. of Public Health: Protocol for MMJ and MIPS, Exhibit 4(a) for all products.

3) USP exposure limits based on daily oral dosing of 1g of concentrate for a 110 lb person.

MY: Mycotoxin Testing [WI-10-05]	Analyst: BMJ	Test Date: 8/6/2021

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

27-MY					
Test ID	Date	Results	MDL	Limits	Status*
Total Aflatoxin	8/6/2021	< MDL	2 ppb	< 20 ppb	PASS
Total Ochratoxin	8/6/2021	4.3	3 ppb	< 20 ppb	PASS

PST: Pesticide Analysis [WI-10-11]	Analyst: CJR	Test Date: 8/9/2021
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The client sample was analyzed for pesticides using Liquid Chromatography with Mass Spectrometric detection (LC/MS/MS). The method used for sample prep was based on the European method for pesticide analysis (EN 15662).

96427-PST

Analyte	CAS	Result	Units	LLD	Limits (ppb)	Status
Abamectin	71751-41-2	ND	ppb	0.20	10	PASS
Spinosad	168316-95-8	ND	ppb	0.10	10	PASS
Pyrethrin	8003-34-7	ND	ppb	0.10	10	PASS
Trifloxystrobin	141517-21-7	ND	ppb	0.10	100	PASS
Spirotetramat	203313-25-1	ND	ppb	0.10	100	PASS
Spiromesifen	283594-90-1	ND	ppb	0.10	100	PASS
Piperonyl butoxide	51-03-6	ND	ppb	0.10	3000	PASS
Paclobutrazol	76738-62-0	ND	ppb	0.10	10	PASS
Myclobutanil	88671-89-0	ND	ppb	0.10	100	PASS
Imidacloprid	138261-41-3	ND	ppb	0.10	5000	PASS
Imazalil	35554-44-0	ND	ppb	0.10	10	PASS
Fenoxycarb	72490-01-8	ND	ppb	0.10	10	PASS
Etoxazole	153233-91-1	ND	ppb	0.10	100	PASS
Dichlorvos	62-73-7	ND	ppb	3.00	10	PASS
Cyfluthrin	68359-37-5	ND	ppb	0.50	2000	PASS
Bifenthrin	82657-04-3	ND	ppb	0.20	3000	PASS
Bifenazate	149877-41-8	ND	ppb	0.10	100	PASS
Azoxystrobin	131860-33-8	ND	ppb	0.10	100	PASS

* Testing limits established by the Massachusetts Department of Public Health, Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries, Exhibit 5. ND indicates "none detected" above the lower limit of detection (LLD). Analytes marked with (*) indicate analytes for which no recovery was observed for a pre-spiked matrix sample due to matrix interference.

END OF REPORT



The client sample was analyzed for plant-based cannabinoids by Liquid Chromatography (LC). The collected data was compared to data collected for certified reference standards at known concentrations.

91000-CN					
ID	Weight %	Concentration (mg/g)			
D9-THC	0.111	1.11			
THCV	ND	ND			
CBD	0.850	8.50			
CBDV	ND	ND			
CBG	ND	ND			
CBC	0.0729	0.729			
CBN	ND	ND			
THCA	0.459	4.59	•		
CBDA	14.2	142			
CBGA	0.429	4.29	•		
D8-THC	ND	ND			
exo-THC	ND	ND			
Total	16.1	161	0%	Cannabinoids (wt%)	14.2%
Max THC	0.513	5.13		Limit of Quantitation (LOQ) =	0.0067 wt%
Max CBD	13.3	133		Limit of Detection (LOD) =	0.0022 wt%

Ratio of Total CBD to THC 25.9:1

Max THC (and Max CBD) are calculated values for total cannabinoids after heating, assuming complete decarboxylation of the acid to the neutral form. It is calculated based on the weight loss of the acid group during decarboxylation: Max THC = $(0.877 \times THCA) + THC$. This calculation does not include other cannabinoid isomers (eg. D8-THC and exo-THC). ND = None detected above the limits of detection (LOD), which is one third of LOQ.

01066 CN

Analyst: AEG

Test Date: 12/28/2020

TP: Terpenes Profile [WI-10-27]

Client sample analysis was performed using full evaporative technique (FET) headspace sample delivery and gas chromatographic (GC) compound separation. A combination of flame ionization detection (FID) and/or mass spectrometric (MS) detection with mass spectral confirmation against the National Institute of Standards and Technology (NIST) Mass Spectral Database, Revision 2017 were used. Chromatographic and/or mass spectral data were processed by quantitatively comparing the analytical peak areas against calibration curves prepared from certified reference standards.

91066-TP

Compound	CAS	Conc. (wt%)	Conc. (ppm)	Qualitative Profile
alpha-pinene	80-56-8	0.0420	420	
camphene	79-92-5	0.0012	11.5	
sabinene*	3387-41-5	ND	ND	
beta-myrcene	123-35-3	0.169	1,690	
beta-pinene	127-91-3	0.0181	181	
alpha-phellandrene	99-83-2	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
delta-3-carene	13466-78-9	ND	ND	
alpha-terpinene	99-86-5	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
alpha-ocimene	502-99-8	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
D-limonene	138-86-3	0.0209	209	
p-cymene	99-87-6	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
cis-beta-ocimene	3338-55-4	0.0094	93.8	
eucalyptol	470-82-6	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
gamma-terpinene	99-85-4	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
terpinolene	586-62-9	<rl< td=""><td><rl< td=""><td></td></rl<></td></rl<>	<rl< td=""><td></td></rl<>	
linalool	78-70-6	0.0133	133	
L-fenchone*	7787-20-4	0.0013	12.6	
isopulegol	89-79-2	ND	ND	
menthol*	89-78-1	ND	ND	
geraniol	106-24-1	ND	ND	
oeta-caryophyllene	87-44-5	0.0764	764	
alpha-humulene	6753-98-6	0.0196	196	
cis-nerolidol	3790-78-1	ND	ND	
trans-nerolidol	40716-66-3	ND	ND	
guaiol	489-86-1	0.0177	177	
caryophyllene oxide	1139-30-6	0.0024	23.9	I Contraction of the second
alpha-bisabolol	23089-26-1	0.0091	91.2	
Total Ternene: 0.4	w/t0/		wt% 0.	.00 0.10 0.2

Total Terpene: 0.4 wt%

* Certified reference standard not available for this compound. Concentration is estimated using the response factor from alpha-pinene. ND = None Detected. RL = Reporting Limit of 5 ppm.

END OF REPORT