

Certificate of Analysis

Produced: May 27, 2025

Sample: Lotus Cookies Patch (Topical) • Client: Mary's Medicinals • Batch: Pass



Manufacturer Info

Manufacturer

JRM02
2701 N. Dettman Rd
Jackson, MI 49201

License

AU-P-000174
Adult-Use and Medicinal - Processor

Test Pkg: 1A4050300018705000205431

Src Pkg: 1A4050300018705000205428

Matrix: Topical

Category: Infused Non-Edible

Sample ID: ICM-250520-044

Collected on: May 20, 2025

Received on: May 20, 2025

Batch Size: 704 Units

Sample Size: 9 Units

Received By: Vanessa Whitehead

Package Size: 1.29 g

Batch Result: Pass

Potency	Pass	Microbial	Pass
Foreign	Pass	Pesticides	Pass
Metals	Pass	Solvents	Pass

Cannabinoid Overview

Total THC Per Package:	50.258 mg/pkg
CBCV Per Package:	0.000 mg/pkg
Sum of Cannabinoids Per Package:	56.747 mg/pkg

POT-001: Cannabinoids by HPLC-DAD

Analyte	Amt (mg/pkg)	Amt (%)	Amt (mg/g)	LOD/LOQ (mg/g)	Analyte	Amt (mg/pkg)	Amt (%)	Amt (mg/g)	LOD/LOQ (mg/g)
CBC	2.5542	0.198	1.98	0.022/0.074	CBN	< LOQ	< LOQ	< LOQ	0.026/0.086
CBCA	ND	ND	ND	0.031/0.101	CBNA	ND	ND	ND	0.012/0.039
CBCV	ND	ND	ND	0.018/0.060	CBT	ND	ND	ND	0.020/0.065
CBD	0.0903	0.007	0.07	0.007/0.024	Δ ⁸ + Δ ⁹ -THC*	50.2584	3.896	38.96	
CBDA	ND	ND	ND	0.010/0.034	Δ ⁸ -THC	ND	ND	ND	0.278/0.916
CBDV	ND	ND	ND	0.025/0.081	Δ ⁹ -THC	50.2584	3.896	38.96	0.264/0.871
CBDVA	ND	ND	ND	0.011/0.037	THCA	ND	ND	ND	0.010/0.032
CBG	3.4701	0.269	2.69	0.018/0.059	THCV	0.3741	0.029	0.29	0.012/0.039
CBGA	ND	ND	ND	0.016/0.052	THCVA	ND	ND	ND	0.016/0.054
CBL	ND	ND	ND	0.016/0.052	Total THC**	50.2584	3.896	38.96	
CBLA	ND	ND	ND	0.006/0.021	Total CBD**	0.0903	0.007	0.07	

* Beyond scope of accreditation

Total THC = THCa * 0.877 + d9-THC; Total CBD = CBDa * 0.877 + CBD; NR= Not Reported, ND= Not Detected, *Reported by Dry Mass*; *analytical instrumentation used Cannabinoids: UHPLC-DAD, Moisture: Mass by Drying, Water Activity: Water Activity Meter, Foreign: Microscope* *Density tested at a temperature range between 19-24 °C, **Water Activity tested at a humidity range between 0-90% Relative Humidity. All OA samples are sampled by the client, All Michigan State Compliant samples sampled using SAMPL-SOP-001.



GCP-001: Chemical Residues by GC-MS/MS

Analyte	Amt (µg/g)	Limit (µg/g)	LOD/LOQ (µg/g)	Pass/Fail	Analyte	Amt (µg/g)	Limit (µg/g)	LOD/LOQ (µg/g)	Pass/Fail
Chlorfenapyr	ND	1	0.036/0.108	Pass	MGK-264	ND	0.2	0.016/0.048	Pass
Cyfluthrin	ND	1	0.058/0.174	Pass	MGK-264 I	ND			N/A
Cypermethrin	ND	1	0.045/0.135	Pass	MGK-264 II	ND			N/A
Methyl parathion	ND	0.2	0.014/0.042	Pass					

LCP-001: Chemical Residues by LC-MS/MS

Analyte	Amt (µg/g)	Limit (µg/g)	LOD/LOQ (µg/g)	Pass/Fail	Analyte	Amt (µg/g)	Limit (µg/g)	LOD/LOQ (µg/g)	Pass/Fail
Abamectin	ND	0.5	0.012/0.041	Pass	Malathion	ND	0.2	0.003/0.011	Pass
Acephate	ND	0.4	0.004/0.014	Pass	Metalaxyl	ND	0.2	0.002/0.012	Pass
Acequinocyl	ND	2	0.006/0.020	Pass	Methiocarb	ND	0.2	0.001/0.013	Pass
Acetamiprid	ND	0.2	0.002/0.011	Pass	Methomyl	ND	0.4	0.002/0.013	Pass
Aldicarb	ND	0.4	0.006/0.019	Pass	Myclobutanil	ND	0.2	0.004/0.013	Pass
Azoxystrobin	ND	0.2	0.002/0.011	Pass	Naled	ND	0.5	0.004/0.014	Pass
Bifenazate	ND	0.2	0.004/0.013	Pass	Oxamyl	ND	1	0.003/0.012	Pass
Bifenthrin	ND	0.2	0.005/0.017	Pass	Paclobutrazol	ND	0.4	0.002/0.012	Pass
Boscalid	ND	0.4	0.003/0.012	Pass	Permethrin	ND	0.2		Pass
Carbaryl	ND	0.2	0.004/0.015	Pass	Permethrin cis	ND		0.002/0.005	N/A
Carbofuran	ND	0.2	0.001/0.013	Pass	Permethrin trans	ND		0.006/0.020	N/A
Chlorantraniliprole	ND	0.2	0.004/0.012	Pass	Phosmet	ND	0.2	0.003/0.011	Pass
Chlorpyrifos	ND	0.2	0.002/0.011	Pass	Prallethrin	ND	0.2	0.006/0.019	Pass
Clofentezine	ND	0.2	0.003/0.012	Pass	Propiconazole	ND	0.4	0.002/0.011	Pass
Daminozide	ND	1	0.005/0.016	Pass	Propoxur	ND	0.2	0.003/0.013	Pass
Diazinon	ND	0.2	0.003/0.011	Pass	Pyrethrins	ND	1		Pass
Dichlorvos	ND	1	0.002/0.011	Pass	Pyrethrins Cinerin I	ND		0.003/0.009	N/A
Dimethoate	ND	0.2	0.002/0.011	Pass	Pyrethrins Jasmolin I	ND		0.001/0.003	N/A
Ethoprophos	ND	0.2	0.002/0.011	Pass	Pyrethrins Pyrethrin I	ND		0.002/0.006	N/A
Etofenprox	ND	0.4	0.003/0.011	Pass	Pyridaben	ND	0.2	0.003/0.011	Pass
Etoxazole	ND	0.2	0.002/0.012	Pass	Spinosad	ND	0.2		Pass
Fenoxycarb	ND	0.2	0.003/0.012	Pass	Spinosad A	ND		0.003/0.009	N/A
Fenpyroximate	ND	0.4	0.002/0.012	Pass	Spinosad D	ND		0.001/0.003	N/A
Fipronil	ND	0.4	0.003/0.012	Pass	Spiromesifen	ND	0.2	0.005/0.016	Pass
Flonicamid	ND	1	0.003/0.011	Pass	Spirotetramat	ND	0.2	0.003/0.012	Pass
Fludioxonil	ND	0.4	0.008/0.027	Pass	Spiroxamine	ND	0.4	0.005/0.015	Pass
Hexythiazox	ND	1	0.003/0.011	Pass	Tebuconazole	ND	0.4	0.003/0.011	Pass
Imazalil	ND	0.2	0.007/0.023	Pass	Thiacloprid	ND	0.2	0.002/0.011	Pass
Imidacloprid	ND	0.4	0.007/0.024	Pass	Thiamethoxam	ND	0.2	0.003/0.011	Pass
Kresoxim-methyl	ND	0.4	0.006/0.021	Pass	Trifloxystrobin	ND	0.2	0.001/0.012	Pass

RS-001: Residual Solvents by HS-GC-MS

Analyte	Amt (µg/g)	Limit (µg/g)	LOD/LOQ (µg/g)	Pass/Fail	Analyte	Amt (µg/g)	Limit (µg/g)	LOD/LOQ (µg/g)	Pass/Fail
1,2-Dichloroethane	ND	5	0.100/0.290	Pass	Ethylene oxide	ND	50	1.250/3.750	Pass
2,2-Dimethylbutane*	ND	290	0.355/1.065	Pass	Ethyl ether	ND	5000	0.380/1.160	Pass
2,2-Dimethylpropane	ND		0.153/0.460	N/A	Heptane	ND	5000	2.060/6.190	Pass
2,3-Dimethylbutane*	ND	290	0.287/0.860	Pass	Hexane	ND	290		Pass
2-Methylbutane	ND	5000	0.271/0.814	Pass	Hexanes all isomers*	ND	290		Pass
2-Methylpentane*	ND	290	0.258/0.774	Pass	Isobutane*	ND	5000	0.178/0.535	Pass
3-Methylpentane	ND	290	0.440/1.319	Pass	Isopropyl alcohol	68.352	5000	0.760/20.000	Pass
Acetone	< LOQ	5000	14.700/120.000	Pass	Methanol	ND	3000	7.160/50.000	Pass
Acetonitrile	ND	410	0.800/12.000	Pass	Methylene chloride	ND	600	1.000/3.000	Pass
Benzene	ND	2	0.100/0.310	Pass	Pentane	ND	5000		Pass
Butane	ND	5000		Pass	Pentanes all isomers*	ND	5000		Pass
Butanes all isomers*	ND	5000		Pass	Propane	ND	5000	1.400/4.190	Pass
Chloroform	ND	60	0.090/0.280	Pass	Toluene	ND	890	0.430/1.290	Pass
Ethanol	ND	5000	1.030/25.000	Pass	Trichloroethylene	ND	80	0.150/0.440	Pass
Ethyl acetate	ND	5000	0.330/0.980	Pass	Total xylenes	ND	2170	0.260/0.770	Pass

* Beyond scope of accreditation

MIC-002: Quantitative Microbial Analysis by Petrifilm Plating

Analyte	Amt (CFU/g)	Pass/Fail	Analyte	Amt (CFU/g)	Pass/Fail
Coliforms	ND	Pass	Yeast & Mold	ND	Pass

MIC-004: Targeted Microbial Detection by qPCR

Analyte	Amt (CFU/g)	Pass/Fail	Analyte	Amt (CFU/g)	Pass/Fail
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David Egerton

Aspergillus spp.	ND	Pass	Shiga toxin-producing E. coli	ND	Pass
Salmonella spp.	ND	Pass			

HM-001: Heavy Metals by ICP-MS

Analyte	Amt (µg/g)	Limit (µg/g)	LOD/LOQ (µg/g)	Pass/Fail	Analyte	Amt (µg/g)	Limit (µg/g)	LOD/LOQ (µg/g)	Pass/Fail
Arsenic	< LOQ	1.5	0.002/0.034	Pass	Lead	0.023	0.5	0.006/0.017	Pass
Cadmium	ND	0.5	0.002/0.005	Pass	Mercury	ND	3	0.003/0.014	Pass
Chromium	< LOQ	2	0.052/0.156	Pass	Nickel	0.151		0.016/0.048	N/A
Copper	0.048		0.006/0.019	N/A					

Notes

Jasmine Huffaker
May 27, 2025

Cannabinoids by HPLC-DAD

*CBC, CBGA, CBCV, CBDV, CBDVA, CBGA, CBL, CBLA, CBNA, CBT, THCV, THCVA have not been evaluated by the CRA and are for informational purposes only.

Accreditations**PJLA Accredited****LCP-001: Chemical Residues by LC-MS/MS**

Abamectin, Acephate, Acequinocyl, Acetamiprid, Aldicarb, Azoxystrobin, Bifenazate, Bifenthrin, Boscalid, Carbaryl, Carbofuran, Chlorantraniliprole, Chlorpyrifos, Clofentezine, Daminozide, Diazinon, Dichlorvos, Dimethoate, Ethoprophos, Etofenprox, Etoxazole, Fenoxycarb, Fenpyroximate, Fipronil, Flonicamid, Fludioxonil, Hexythiazox, Imazalil, Imidacloprid, Kresoxim-methyl, Malathion, Metalaxyl, Methiocarb, Methomyl, Myclobutanil, Naled, Oxamyl, Paclobutrazol, Permethrin, Permethrin cis, Permethrin trans, Phosmet, Prallethrin, Propiconazole, Propoxur, Pyrethrins, Pyrethrins Cinerin I, Pyrethrins Jasmolin I, Pyrethrins Pyrethrin I, Pyridaben, Spinosad, Spinosad A, Spinosad D, Spiromesifen, Spirotetramat, Spiroxamine, Tebuconazole, Thiadiprid, Thiamethoxam, Trifloxystrobin

RS-001: Residual Solvents by HS-GC-MS

1,2-Dichloroethane, 2,2-Dimethylpropane, 2-Methylbutane, 3-Methylpentane, Acetone, Acetonitrile, Benzene, Butane, Chloroform, Ethanol, Ethyl acetate, Ethyl ether, Ethylene oxide, Heptane, Hexane, Isopropyl alcohol, Methanol, Methylene chloride, Pentane, Propane, Toluene, Total xylenes, Trichloroethylene

POT-001: Cannabinoids by HPLC-DAD

CBC, CBGA, CBCV, CBD, CBDA, CBDV, CBDVA, CBG, CBGA, CBL, CBLA, CBN, CBNA, CBT, Delta-8-THC, Delta-9-THC, THCA, THCV, THCVA, Total CBD, Total THC

GCP-001: Chemical Residues by GC-MS/MS

Chlorfenapyr, Cyfluthrin, Cypermethrin, MGK-264, MGK-264 I, MGK-264 II, Methyl parathion

MIC-004: Targeted Microbial Detection by qPCR

Aspergillus spp., Salmonella spp., Shiga toxin-producing E. coli

HM-001: Heavy Metals by ICP-MS

Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel

FFM-001: Foreign Matter by Microscopic Inspection

Inorganic Matter, Organic Matter

MIC-002: Quantitative Microbial Analysis by Petrifilm Plating

Coliforms, Yeast & Mold

