



## Ohio Department of Commerce Medical Marijuana Control Program

### Contaminant Thresholds

The Ohio Department of Commerce’s Medical Marijuana Control Program (MMCP) provides the following “Contaminant Threshold” information to medical marijuana licensees. The table below details the various contaminant thresholds established by the MMCP. If the contaminant exceeds the established thresholds, the medical marijuana cannot be distributed to patients. Please note Testing laboratories should report the results of contaminant testing into METRC, identifying if the results exceed the thresholds below.

<b>Test Group</b>	<b>Analyte</b>	<b>CFU/g</b>	<b>Rule Reference</b>	<b>Document Reference</b>
<b>Microbial- Unprocessed Materials</b>	Total Viable Aerobic Bacteria	10 <sup>5</sup>	Ohio Admin. Code 3796:4-2-04(F)	Cannabis Inflorescence. Cannabis spp. Standards of Identity, Analysis, and Quality Control - American Herbal Pharmacopoeia (2014) Table 9
	Total Yeast and Mold	10 <sup>4</sup>		
	Total Coliforms	10 <sup>3</sup>		
	Bile-Tolerant Gram-Negative Bacteria	10 <sup>3</sup>		
	E. Coli (pathogenic strains)	Not Detected in 1 g		
	Salmonella spp.	Not Detected in 1 g		
<b>Microbial- Processed Materials</b>	Total Viable Aerobic Bacteria	10 <sup>5</sup>	Ohio Admin. Code 3796:4-2-04(F)	Cannabis Inflorescence. Cannabis spp. Standards of Identity, Analysis, and Quality Control - American Herbal Pharmacopoeia (2014) Table 9
	Total Yeast and Mold	10 <sup>4</sup>		
	Total Coliforms	10 <sup>3</sup>		
	Bile-Tolerant Gram-Negative Bacteria	10 <sup>3</sup>		
	E. Coli (pathogenic strains)	Not Detected in 1 g		
	Salmonella spp.	Not Detected in 1 g		
<b>Microbial- CO<sup>2</sup> and Solvent- Based Extracts</b>	Total Viable Aerobic Bacteria	10 <sup>4</sup>	Ohio Admin. Code 3796:4-2-04(F)	Cannabis Inflorescence. Cannabis spp. Standards of Identity, Analysis, and Quality Control - American Herbal Pharmacopoeia (2014) Table 9
	Total Yeast and Mold	10 <sup>3</sup>		
	Total Coliforms	10 <sup>2</sup>		
	Bile-Tolerant Gram-Negative Bacteria	10 <sup>2</sup>		
	E. Coli (pathogenic strains)	Not Detected in 1 g		
	Salmonella spp.	Not Detected in 1 g		



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Test Group	Analyte	CAS Reg. #	PPM	PPB	Rule Reference	Document Reference
<b>Heavy Metals</b>	Arsenic	7440-38-2	0.42	420	Ohio Admin. Code 3796:4-2-04(H)	0.14 ug/kg of bodyweight, assumes 30kg bodyweight and 0.1g consumption of product
	Cadmium	7440-43-9	0.27	270		0.09 ug/kg of bodyweight, assumes 30kg bodyweight and 0.1g consumption of product
	Lead	7439-92-1	0.87	870		0.29 ug/kg of bodyweight, assumes 30kg bodyweight and 0.1g consumption of product
	Mercury	7439-97-6	0.87	870		0.29 ug/kg of bodyweight, assumes 30kg bodyweight and 0.1g consumption of product

Test Group	Analyte	CAS Reg. #	PPM	PPB	Rule Reference	Document Reference
<b>Mycotoxin</b>	Aflatoxin B1	1162-65-8	0.02	20	Ohio Admin. Code 3796:4-2-04(G)	N/A
	Aflatoxin B2	7220-81-7	0.02	20		
	Aflatoxin G1	1165-39-5	0.02	20		
	Aflatoxin G2	7241-98-7	0.02	20		
	Total Aflatoxins		0.02	20		
	Ochratoxin A	303-47-9	0.02	20		

Test Group	Analyte	CAS Reg. #	PPM	Rule Reference	Document Reference
<b>Residual Solvent-Approved</b>	Ethanol	64-17-5	5,000	N/A	International Conference for Harmonization (ICH) Guideline Q3C on Impurities AND Guidelines for Residual Solvents; MMCP Residual Solvents Threshold Guidance (08/15/2019)
	Heptane	142-82-5	5,000		
	Propane	74-98-6	5,000		
	Isobutane	75-28-5	5,000	N/A	
	n-Butane	106-97-8	5,000		
<b>Residual Solvent-Unapproved</b>	Acetone	67-64-1	5,000	N/A	International Conference for Harmonization (ICH) Guideline Q3C on Impurities AND Guidelines for Residual Solvents; MMCP Residual Solvents Threshold Guidance (08/15/2019)
	Benzene	71-43-2	2		
	Hexane	110-54-3	290		
	Isopropyl alcohol	67-63-0	5,000		
	Pentane	109-66-0	5,000		
	Xylenes	1330-20-7	2,170		



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Test Group	Analyte	CAS Reg. #	PPM	PPB	Rule Reference	Document Reference
<b>Pesticide-Approved</b>	Bifenazate	149877-41-8	0.10	100	Ohio Admin. Code 3796:4-2-04(I)	Lowest threshold for food product in Subpart C of 40 C.F.R. Part 180, as effective on September 8, 2017
	Cyfluthrin	68359-37-5	0.01	10		
	Flonicamid	158062-67-0	0.03	30		
	Fludioxonil	131341-86-1	0.01	10		
	Piperonyl Butoxide	51-03-6	0.10	100		
	Pyrethrins	8003-34-7	0.05	50		
	Spinosad	168316-95-8	0.02	20		
	Spirotetramat	203313-25-1	0.01	10		
	Thiamethoxam	153719-23-4	0.02	20		
Trifloxystrobin	141517-21-7	0.01	10			
<b>Pesticide-Unapproved</b>	Abamectin	71751-41-2	LOD	LOD	Ohio Admin. Code 3796:4-2-04(I)	MMCP Approved Pesticides for Use in the Cultivation of Medical Marijuana
	Aldicarb	116-06-3	LOD	LOD		
	Daminozide	1596-84-5	LOD	LOD		
	DDVP	62-73-7	LOD	LOD		
	Diazinon	333-41-5	LOD	LOD		
	Dimethoate	60-51-5	LOD	LOD		
	Etoxazole	153233-91-1	LOD	LOD		
	Imidacloprid	138261-41-3	LOD	LOD		
	Myclobutanil	88671-89-0	LOD	LOD		
Paclobutrazol	76738-62-0	LOD	LOD			

Test Group	Analyte	%	Rule Reference	Document Reference
<b>Moisture Content-Flower/Shake/Trim</b>	Moisture Content	N/A	N/A	N/A

Test Group	Analyte	aw	Rule Reference	Document Reference
<b>Water Activity-Flower/Shake/Trim</b>	Water Activity	N/A	N/A	N/A