

MBLL Product Analysis Parameter Guidelines

**Updated August 06 2026*

Objective

MBLL has partnered with Central Testing Laboratory, LTD to perform analysis on alcoholic beverages. The tables on the following pages outline the acceptable limits for each tested parameter, helping ensure Manitobans are purchasing safe, high-quality products.

The following table can be used to help understand the product's test results by comparing them to the acceptable limits set by MBLL and Health Canada, and identifying what actions may be required:

Status	Description	Action Required
Compliant	Within Health Canada and MBLL acceptable limits	No action required
Monitor	Approaching Health Canada or MBLL limits	Will receive follow-up direction; retesting or sensory review may occur
Non-Compliant	Exceeds Health Canada or MBLL limits	Follow-up will be issued; CFIA may be notified to assess risk and advise the next steps. Changes and recalls are possible.

Analytical Services and Pricing

	BEER	CIDER	SPIRITS	READY TO DRINK	WINE
ABV	✓	✓	✓	✓	✓
Methanol			✓		
Ethyl Carbamate	✓	✓	✓	✓	✓
SO2 Total		✓		✓	✓
SO2 Free		✓		✓	✓
Volatile Acidity		✓			✓
Sorbic Acid		✓		✓	✓
Sugar	✓	✓	✓	✓	✓
Arsenic	✓	✓	✓	✓	✓
Cadmium	✓	✓	✓	✓	✓
Cobalt	✓	✓	✓	✓	✓
Copper					✓
Lead	✓	✓	✓	✓	✓
Synthetic Dyes	✓	✓	✓	✓	✓
PRICING Does not include GST	\$325.00	\$375.00	\$350.00	\$350.00	\$375.00
Notes					
Central Testing Laboratory has a standard turnaround time of 10 business days for test results. A minimum of 750ml is required for testing; 1 litre is preferred in case repeat analysis is necessary.					

**Pricing is subject to change*

Standards and Parameters for Product Testing: Beer

Parameter	Compliant	Monitor	Non-Compliant	Health Canada Limit
ABV If 4.0% ABV or less	Less than or equal to $\pm 0.3\%$	$\pm 0.4\%$ to $\pm 0.5\%$	Greater than or equal to $\pm 0.6\%$	N/A
ABV If 4.1% - 5.5% ABV	Less than or equal to $\pm 0.5\%$	$\pm 0.6\%$ to $\pm 1.0\%$	Greater than or equal to $\pm 1.1\%$	N/A
ABV If 5.6% ABV or greater	Less than or equal to $\pm 1.0\%$	$\pm 1.1\%$ to $\pm 1.5\%$	Greater than or equal to $\pm 1.6\%$	N/A
Ethyl Carbamate: Products under 8.5% ABV	Less than or equal to 15 $\mu\text{g/L}$	N/A	Greater than 15 $\mu\text{g/L}$	N/A
Ethyl Carbamate: Products over 8.5% ABV	Less than or equal to 30 $\mu\text{g/L}$	N/A	Greater than 30 $\mu\text{g/L}$	N/A
Sugar	Less than or equal to 40 g/L	N/A	Greater than 40 g/L	Limit 4% (40 g/L)
Arsenic	Less than or equal to 100 $\mu\text{g/L}$	N/A	Greater than 100 $\mu\text{g/L}$	Limit 100 $\mu\text{g/L}$
Cadmium	Less than or equal to 20 $\mu\text{g/L}$	N/A	Greater than 20 $\mu\text{g/L}$	Limit 20 $\mu\text{g/L}$
Cobalt	Less than or equal to 20 $\mu\text{g/L}$	N/A	Greater than 20 $\mu\text{g/L}$	Limit 20 $\mu\text{g/L}$
Lead	Less than or equal to 200 $\mu\text{g/L}$	N/A	Greater than 200 $\mu\text{g/L}$	Limit 200 $\mu\text{g/L}$
Synthetic Dyes	Not Present	N/A	Present	No Synthetic Dyes
Notes				
<i>Abbreviations and units are defined in the Glossary in Appendix A</i>				

Standards and Parameters for Product Testing: Cider

Parameter	Compliant	Monitor	Non-Compliant	Health Canada Limit
ABV If 2.5% - 4.0% ABV ****	Less than or equal to $\pm 0.3\%$	$\pm 0.4\%$ to $\pm 0.5\%$	Greater than or equal to $\pm 0.6\%$	N/A
ABV If 4.1% - 5.5% ABV	Less than or equal to $\pm 0.5\%$	$\pm 0.6\%$ to $\pm 1.0\%$	Greater than or equal to $\pm 1.1\%$	N/A
ABV If 5.6% - 13% ABV ****	Less than or equal to $\pm 1.0\%$	$\pm 1.1\%$ to $\pm 1.5\%$	Greater than or equal to $\pm 1.6\%$	N/A
Ethyl Carbamate	Less than or equal to 30 $\mu\text{g/L}$	N/A	Greater than 30 $\mu\text{g/L}$	Limit 30 $\mu\text{g/kg}$ (30 $\mu\text{g/L}$) ***
SO₂ Total: Products under 35 g/L sugar	Less than or equal to 300 mg/L	N/A	Greater than 300 mg/L	Limit 420 mg/L
SO₂ Total: Products with 35 g/L sugar and over	Less than or equal to 400 mg/L	N/A	Greater than 400 mg/L	Limit 420 mg/L
SO₂ Free: Products under 35 g/L sugar	Less than or equal to 50 mg/L	N/A	Greater than 50 mg/L	Limit 70 mg/L
SO₂ Free: Products with 35 g/L sugar and over	Less than or equal to 70 mg/L	N/A	Greater than 70 mg/L	Limit 70 mg/L
Volatile Acidity (acetic acid g/L) **	Less than or equal to 1.3 g/L	N/A	Greater than 1.3 g/L	Limit 0.2% w/v (2 g/L)
Sorbic Acid: Products under 10 g/L sugar	Less than or equal to 200 mg/L	Greater than 200 mg/L	Greater than 500 ppm (500 mg/L)	Limit 500 ppm (500 mg/L)
Sorbic Acid: Products over 10 g/L sugar	Less than or equal to 500 mg/L	N/A	Greater than 500 ppm (500 mg/L)	Limit 500 ppm (500 mg/L)
Sugar*	N/A	N/A	N/A	N/A
Arsenic	Less than or equal to 100 $\mu\text{g/L}$	N/A	Greater than 100 $\mu\text{g/L}$	Limit 100 $\mu\text{g/L}$
Cadmium	Less than or equal to 20 $\mu\text{g/L}$	N/A	Greater than 20 $\mu\text{g/L}$	Limit 20 $\mu\text{g/L}$
Cobalt	Less than or equal to 20 $\mu\text{g/L}$	N/A	Greater than 20 $\mu\text{g/L}$	Limit 20 $\mu\text{g/L}$
Lead	Less than or equal to 200 $\mu\text{g/L}$	N/A	Greater than 200 $\mu\text{g/L}$	Limit 200 $\mu\text{g/L}$
Synthetic Dyes	Not Present	N/A	Present	No Synthetic Dyes

Notes

*Sugar content is tested to determine the allowable amount of SO₂

**Volatile Acidity as Sulfuric Acid (g/L) = Volatile Acidity x 0.815

***Conversion factor = micrograms per litre divided by the density (g/cm³) of the product

****Cider alcohol by volume range: 2.5% - 13.0% ABV

Abbreviations and units are defined in the Glossary in Appendix A

Standards and Parameters for Product Testing: Spirit

Parameter	Compliant	Monitor	Non-Compliant	Health Canada Limit
ABV: No macerated fruit/plants	Less than or equal to $\pm 0.3\%$	$\pm 0.4\%$ to $\pm 0.9\%$	Greater than or equal to $\pm 1.0\%$	N/A
ABV: Macerated fruit/plants	Less than or equal to $\pm 1.0\%$	$\pm 1.1\%$ to $\pm 1.9\%$	Greater than or equal to $\pm 2.0\%$	N/A
Methanol	Less than or equal to 6000 mg/L	N/A	Greater than 6000 mg/L	N/A
Ethyl Carbamate: No fruit spirit	Less than or equal to 150 $\mu\text{g/L}$	N/A	Greater than 150 $\mu\text{g/L}$	Limit 150 $\mu\text{g/kg}$ * (150 $\mu\text{g/L}$)
Ethyl Carbamate: fruit spirit	Less than or equal to 400 $\mu\text{g/L}$	N/A	Greater than 400 $\mu\text{g/L}$	Limit 400 $\mu\text{g/kg}$ * (400 $\mu\text{g/L}$)
Sugar: Vodka / Dry Gin products	Less than or equal to 2 g/L	N/A	Greater than 2 g/L	Limit 2 g/L
Arsenic	Less than or equal to 100 $\mu\text{g/L}$	N/A	Greater than 100 $\mu\text{g/L}$	Limit 100 $\mu\text{g/L}$
Cadmium	Less than or equal to 20 $\mu\text{g/L}$	N/A	Greater than 20 $\mu\text{g/L}$	Limit 20 $\mu\text{g/L}$
Cobalt	Less than or equal to 20 $\mu\text{g/L}$	N/A	Greater than 20 $\mu\text{g/L}$	Limit 20 $\mu\text{g/L}$
Lead	Less than or equal to 200 $\mu\text{g/L}$	N/A	Greater than 200 $\mu\text{g/L}$	Limit 200 $\mu\text{g/L}$
Synthetic Dyes: Liqueurs only	Not Present	N/A	Present	Testing parameters in Appendix A
Notes				
*Conversion factor = micrograms per litre divided by the density (g/cm^3) of the product				
<i>Abbreviations and units are defined in the Glossary in Appendix A</i>				

Standards and Parameters for Product Testing: Ready to Drink

Unstandardized Alcoholic Beverages

Parameter	Compliant	Monitor	Non-Compliant	Health Canada Limit
ABV If 4.0% ABV or less	Less than or equal to ±0.3%	±0.4% to ±0.5%	Greater than or equal to ±0.6%	N/A
ABV If 4.1% or greater	Less than or equal to ±0.5%	±0.6% to ±0.9%	Greater than or equal to ±1.0%	N/A
Ethyl Carbamate: nondairy based product	Less than or equal to 15 µg/L	N/A	Greater than 15 µg/L	Limit 15 µg/kg (15 µg/L) *
Ethyl Carbamate: dairy based product	Less than or equal to 100 µg/L	N/A	Greater than 100 µg/L	Limit 100 µg/kg (100 µg/L) *
SO2 Total	Less than or equal to 100 mg/L	N/A	Greater than 100 mg/L	Limit 100 ppm (100 mg/L)
SO2 Free	Less than or equal to 30 mg/L	N/A	Greater than 30 mg/L	Limit 30 ppm (30 mg/L)
Sorbic Acid	Less than or equal to 500 mg/L	N/A	Greater than 500 mg/L	Limit 500 ppm (500 mg/L)
Sugar	N/A	N/A	N/A	N/A
Arsenic	Less than or equal to 100 µg/L	N/A	Greater than 100 µg/L	Limit 100 µg/L
Cadmium	Less than or equal to 20 µg/L	N/A	Greater than 20 µg/L	Limit 20 µg/L
Cobalt	Less than or equal to 20 µg/L	N/A	Greater than 20 µg/L	Limit 20 µg/L
Lead	Less than or equal to 200 µg/L	N/A	Greater than 200 µg/L	Limit 200 µg/L
Synthetic Dyes	For details on approved dyes and their standards, refer to Appendix A			
Notes				
*Conversion factor = micrograms per litre divided by the density (g/cm³) of the product				
Abbreviations and units are defined in the Glossary in Appendix A				

Standards and Parameters for Product Testing: Sake, Makgeolli, and Soju

Parameter	Compliant	Monitor	Non-Compliant	Health Canada Limit
ABV Sake and Makgeolli If 4.0% ABV or less	Less than or equal to ±0.3%	±0.4% to ±0.5%	Greater than or equal to ±0.6%	N/A
ABV Sake and Makgeolli If 4.1%-5.5% ABV	Less than or equal to ±0.5%	±0.6% to ±1.0%	Greater than or equal to ±1.1%	N/A
ABV Sake and Makgeolli If 5.6% ABV or more	Less than or equal to ±1.0%	±1.1% to ±1.5%	Greater than or equal to ±1.6%	N/A
ABV: Soju	Less than or equal to ±0.3%	±0.4% to ±0.9%	Greater than or equal to ±1.0%	N/A
Methanol: Soju	Less than or equal to 6000 mg/L	N/A	Greater than 6000 mg/L	N/A
Ethyl Carbamate: Sake and Makgeolli under 8.5% ABV	Less than or equal to 15 µg/L	N/A	Greater than 15 µg/L	N/A
Ethyl Carbamate: Sake and Makgeolli over 8.5% ABV	Less than or equal to 20 µg/L	N/A	Greater than 15 µg/L	N/A
Ethyl Carbamate: Soju	Less than or equal to 20 µg/L	N/A	Greater than 15 µg/L	Limit 100 µg/kg (100 µg/L) *
Sorbic Acid: Sake and Makgeolli	Less than or equal to 500 mg/L	N/A	Greater than 500 mg/L	Limit 500 ppm (500 mg/L)
Sugar **	N/A	N/A	N/A	N/A
Arsenic	Less than or equal to 20 µg/L	N/A	Greater than 15 µg/L	Limit 100 µg/L
Cadmium	Less than or equal to 20 µg/L	N/A	Greater than 15 µg/L	Limit 100 µg/L
Cobalt	Less than or equal to 20 µg/L	N/A	Greater than 15 µg/L	Limit 100 µg/L
Lead	Less than or equal to 20 µg/L	N/A	Greater than 15 µg/L	Limit 100 µg/L
Synthetic Dyes	For details on approved dyes and their standards, refer to Appendix A			
Notes				
*Conversion factor = micrograms per litre divided by the density (g/cm³) of the product				
**Sugar content is tested to determine the allowable amount of SO2				
Abbreviations and units are defined in the Glossary in Appendix A				

Standards and Parameters for Product Testing: Wine

Includes Mead (Honey Wine)

Parameter	Compliant	Monitor	Non-Compliant	Health Canada Limit
ABV: Table wine products	Less than or equal to $\pm 1.0\%$	$\pm 1.1\%$ to $\pm 1.9\%$	Greater than or equal to $\pm 2.0\%$	N/A
ABV: Fortified wine products	Less than or equal to $\pm 0.5\%$	$\pm 0.6\%$ to $\pm 1.4\%$	Greater than or equal to $\pm 1.5\%$	N/A
Ethyl Carbamate: Table wine products	Less than or equal to 30 $\mu\text{g/L}$	N/A	Greater than 30 $\mu\text{g/L}$	Limit 30 $\mu\text{g/kg}$ (30 $\mu\text{g/L}$) *
Ethyl Carbamate: Fortified wine products	Less than or equal to 100 $\mu\text{g/L}$	N/A	Greater than 100 $\mu\text{g/L}$	Limit 100 $\mu\text{g/kg}$ (100 $\mu\text{g/L}$) *
SO ₂ Total: Products under 35g/L sugar	Less than or equal to 300 mg/L	N/A	Greater than 300 mg/L	Limit 420 mg/L
SO ₂ Total: Products with 35g/L sugar and over	Less than or equal to 400 mg/L	N/A	Greater than 400 mg/L	Limit 420 mg/L
SO ₂ Free: Products under 35g/L sugar	Less than or equal to 50 mg/L	N/A	Greater than 50 mg/L	Limit 70 mg/L
SO ₂ Free: Products with 35g/L sugar and over	Less than or equal to 70 mg/L	N/A	Greater than 70 mg/L	Limit 70 mg/L
Volatile Acidity (acetic acid g/L) **	Table wines: Less than or equal to $\pm 1.3\text{g/L}$ Late Harvest: Less than or equal to $\pm 1.5\text{g/L}$ Select Late: Less than or equal to $\pm 1.8\text{g/L}$ Ice Wines: Less than or equal to $\pm 2.1\text{g/L}$	N/A	Greater than 2.4 g/L	Limit 2.4 g/L
Sorbic Acid: Products >9% ABV or <10 g/L sugar	Less than or equal to 200 mg/L	Greater than 200 mg/L	Greater than 500 ppm (500 mg/L)	Limit 500 ppm (500 mg/L)
Sorbic Acid: Products <9% ABV or >10 g/L sugar	Less than or equal to 500 mg/L	N/A	Greater than 500 ppm (500 mg/L)	Limit 500 ppm (500 mg/L)
Sugar: ice wine	Greater than or equal to 125 g/L	N/A	Greater than 125 g/L	N/A
Arsenic	Less than or equal to 100 $\mu\text{g/L}$	N/A	Greater than 100 $\mu\text{g/L}$	Limit 100 $\mu\text{g/L}$
Cadmium	Less than or equal to 20 $\mu\text{g/L}$	N/A	Greater than 20 $\mu\text{g/L}$	Limit 20 $\mu\text{g/L}$
Cobalt	Less than or equal to 20 $\mu\text{g/L}$	N/A	Greater than 20 $\mu\text{g/L}$	Limit 20 $\mu\text{g/L}$
Copper	Less than or equal to 1000 $\mu\text{g/L}$	N/A	Greater than 1000 $\mu\text{g/L}$	Limit 1000 $\mu\text{g/L}$
Lead	Less than or equal to 200 $\mu\text{g/L}$	N/A	Greater than 200 $\mu\text{g/L}$	Limit 200 $\mu\text{g/L}$
Synthetic Dyes	Not Present	N/A	Present	No Synthetic Dyes
Notes				
*Conversion factor = micrograms per litre divided by the density (g/cm^3) of the product				

****Volatile Acidity as Sulfuric Acid (g/L) = Volatile Acidity x 0.815**

Abbreviations and units are defined in the Glossary in Appendix A

Appendix A: Additional Information

Synthetic Dyes

Group	Dye Name	Maximum Allowed Limit
Group A	Allura Red	300 mg/L
	Amaranth	300 mg/L
	Erythrosine	300 mg/L
	Tartrazine	300 mg/L
	Sunset Yellow FCF	300 mg/L
	Indigo Carmine (Indigotine)	300 mg/L
Group B	Fast Green	100 mg/L
	Brilliant Blue FCF	100 mg/L
Group C	Any combination of synthetic dyes in Group A or B	300 mg/L
Notes		
Under the Food and Drug Regulations, synthetic dyes are not allowed in standardized beverage alcohol products, with the exception of liqueurs.		
Each specific dye used in a product must not exceed the maximum allowed limit for that dye.		
https://www.canada.ca/en/health-canada/services/food-nutrition/food-safety/food-additives/lists-permitted/3-colouring-agents.html		

Glossary

Abbreviation	Meaning
ABV	Alcohol by volume
g/L	Grams per litre
µg/L	Micrograms per litre
ppm	Parts per million
mg/L	Milligrams per litre
µg/kg	Micrograms per kilogram
w/v	Weight/volume
mg	Milligram