



# **Product Testing Parameter Guidelines - Ready to Drink**

# **Unstandardized Alcoholic Beverages**

#### **PURPOSE**

The following table outlines acceptable limits for each parameter the NSLC test for. Each column represents an internal triage level with corresponding actions. This table is meant to help you understand the results of your Certificate of Analysis (COA).

GREEN (adherence) indicates your product complied with Health Canada regulated and NSLC limits and no further action is required.

YELLOW (minor variance) indicates your product is approaching either the Health Canada regulated limit or the NSLC limit. Products that fall into the yellow category will receive follow-up communication and may be triaged for further assessment including retesting or a sensory review.

RED (major variance) indicates your product has exceeded either the Health Canada regulated limit or the NSLC limit. Products in this category will receive a follow-up communication and may trigger a notification to the Canadian Food Inspection Agency (CFIA), if applicable. The CFIA will work with you directly to assess risk and advise on the next steps if required.

#### PARAMETER LIMITS

TESTING PARAMETER	ADHERENCE	MINOR VARIANCE	MAJOR VARIANCE	HEALTH CANADA LIMIT
ABV Allowance - If 4.0% ABV or less	Less than or equal to ± 0.3%	± 0.4% to ± 0.5%	Greater than or equal to $\pm$ 0.6%	N/A
ABV Allowance - 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
Total SO <sub>2</sub>	Less than or equal to 100 mg/L	N/A	Greater than 100 mg/L	Limit 100 ppm (100 mg/L)
Free SO <sub>2</sub>	Less than or equal to 30 mg/L	N/A	Greater than 30 mg/L	Limit 30 ppm (30 mg/L)
Sugar	N/A	N/A	N/A	N/A
Sorbic acid	Less than or equal to 500 mg/L	N/A	Greater than 500 mg/L	Limit 500 ppm (500 mg/L)
Ethyl Carbamate - non dairy 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)
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	See below for parameter limits			
Caffeine**	Less than or equal to 30 mg per serving	N/A	Greater than 30 mg per serving	N/A

#### **GLOSSARY OF TERMS**

ABV - alcohol by volume **ppm** - parts per million mg/L - milligrams per litre μg/L - micrograms per litre μg/kg - micrograms per kilogram mg - milligrams

<sup>\*</sup>Conversion factor = micrograms per litre divided by the density (q/cm³) of the

product
\*\*Serving defined as complete contents of single-serve items or 75 mL, whichever is areater

## PARAMETERS LIMITS - SAKE, MAKGEOLLI AND SOJU

TESTING PARAMETER	ADHERENCE	MINOR VARIANCE	MAJOR VARIANCE	HEALTH CANADA LIMIT
ABV Allowance 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 $\pm$ 0.6%	N/A
ABV Allowance 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 Allowance Sake and Makgeolli – If 5.6% ABV or greater	Less than or equal to ± 1.0%	± 1.1% to ± 1.5%	Greater than or equal to ± 1.6%	N/A
ABV Allowance – <b>Soju</b>	Less than or equal to ± 0.3%	± 0.4% to ± 0.9%	Greater than or equal to $\pm$ 1.0%	N/A
Methanol - <b>Soju</b>	Less than or equal to 6000 mg/L	N/A	Greater than to 6000 mg/L	N/A
Sugar ***	N/A	N/A	N/A	N/A
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)
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 30 μg/L	N/A	Greater than 30 μg/L	N/A
Ethyl Carbamate – <b>Soju</b>	Less than or equal to 150 μg/L	N/A	Greater than 150 μg/L	Limit 150 μg/kg *(150 μg/L)
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	See below for parameter limits			
Caffeine**	Less than or equal to 30 mg per serving	N/A	Greater than 30 mg per serving	N/A

### **GLOSSARY OF TERMS**

ABV - alcohol by volume
ppm - parts per million
mg/L - milligrams per litre
μg/L - micrograms per litre
μg/kg - micrograms per kilogram
mg - milligrams

\*\*\*Sugar is tested to facilitate SO2 allowances



<sup>\*</sup> Conversion factor = micrograms per litre divided by the density (g/cm3) of the Product \*\*Serving defined as complete contents of single-serve items or 75 mL, whichever is greater

#### **SYNTHETIC DYES**

**Note:** According to the Food and Drug Regulations, synthetic dyes are not permitted for use in standardized beverage alcohol products except for Liqueurs.

Group	Dye Name	Maximum Allowable Limit	
Group A*	Allura Red Amaranth Erythrosine Tartrazine Sunset Yellow FCF Indigo Carmine (Indigotine)	300 mg/L 300 mg/L 300 mg/L 300 mg/L 300 mg/L 300 mg/L	
Group B*	Fast Green Brillint Blue FCF	100 mg/L 100 mg/L	
Group C	Any combination of synthetic dyes named in Group A or B above.	300 mg/L Individual dyes shall not exceed maximum Allowable Limit stated for the named dye.	

<sup>\*</sup>Health Canada - List of Permitted Colouring Agents - Group A - see Item No. 3
\*Health Canada - List of Permitted Colouring Agents - Group B - see Item No. 4

#### FOR MORE INFORMATION

If you have further questions regarding the established limits, product testing, or your COA results, please direct them to **ProductTesting@MyNSLC.com** 



