

## Scope of Accreditation For Liquor Control Board of Ontario

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In recognition of a successful assessment to ISO/IEC 17025 2005, accreditation is granted to **Liquor Control Board of Ontario** to perform the following tests:

Accreditation granted through: **July 13, 2010**

### Testing

Technology	Range, when necessary	Methods Used	Product Types	Remarks
Spectroscopy	>20 mg/L	A10	Determination of Sorbic Acid in Beverage Alcohol Excluding Spirits and Liquors by Segmented Continuous Flow Analysis	Skalar, Colorimetry
Spectroscopy	>0.1 g/L	A11	Determination of Volatile Acidity in Beverage Alcohol Excluding Spirits and Liquors by Segmented Continuous Flow Analysis	Skalar, Colorimetry
Spectroscopy	>0.1 g/L	A12	Determination of Total Reducing Sugar in Beverage Alcohol by Segmented Continuous Flow Analysis	Skalar, Colorimetry
Spectroscopy	>20 µg/L	A13	Determination of Cyanide Expressed as Potassium Ferrocyanide in Beverage Alcohol Excluding Spirits and Non-Pitted Fruit Liquors by Segmented Continuous Flow Analysis	Skalar, Colorimetry
Spectroscopy	>6 mg/L	A14	Determination of Free SO <sub>2</sub> in Beverage Alcohol Excluding Spirits and Liquors by Segmented Continuous Flow Analysis	Skalar, Colorimetry
Spectroscopy	>12 mg/L	A15	Determination of Total SO <sub>2</sub> in Beverage Alcohol Excluding Spirits and Liquors by Segmented Continuous Flow Analysis	Skalar, Colorimetry
Spectroscopy	>0.5% v/v	A16	Determination of Ethanol in Beverage Alcohol Excluding Spirits and Liquors by Segmented Continuous Flow Analysis	Skalar, Colorimetry
Chromatography	>0.5% v/v	A18	Determination of Ethanol in Beverage Alcohol below 21% alc./vol. by Gas Chromatography-Flame Ionization Detection	GC-FID
Chromatography	12-80% v/v	A43	Determination of Ethanol in Liquors and Spirits by Gas Chromatography-Flame Ionization Detection	GC-FID

<b>Technology</b>	<b>Range, when necessary</b>	<b>Methods Used</b>	<b>Product Types</b>	<b>Remarks</b>
Chromatography	>240 mg/L	A19	Determination of Methanol in Liquors and Spirits by Gas Chromatography-Flame Ionization Detection	GC-FID
Chromatography	>40 mg/L	A35	Determination of Methanol in Wine by Gas Chromatography-Flame Ionization Detection	GC-FID
Chromatography	>10µg/L	A21	Determination of Methyl Anthranilate in Wines by Gas Chromatography-Mass Selective Detection	GC-MSD
Chromatography	>5µg/L	A20	Determination of Ethyl Carbamate in Beverage Alcohol by Gas Chromatography-Mass Selective Detection	GC-MSD
Chromatography	>30µg/L	A22	Determination of Pesticide Residues in Wines and Beer by Gas Chromatography-Mass Selective Detection	GC-MSD
Chromatography	>0.5µg/L	A24	Determination of 2,4,6 Trichloroanisole and 2,4,6 Trichlorophenol in Corks, Wines and Spirits by Gas Chromatography-Mass Selective Detection	GC-MSD
Chromatography	>50µg/L	A23	Determination of Pesticide Residues in Wine by HPLC-PDA	HPLC-PDA
Chromatography	>1 mg/L	A27	Determination of Synthetic Dyes in Alcoholic Beverages by HPLC-PDA	HPLC-PDA
Chromatography	>10 mg/L	A28	Determination of Citric Acid in Vodkas by HPLC-PDA	HPLC-PDA
Chromatography	>85 mg/L	A40	Determination of Citric Acid in Wines by HPLC-PDA	HPLC-PDA
Chromatography	>0.5 µg/L	A51	Detection of Ochratoxin A in Wine and Beer by HPLC-Fluorescence Detector	HPLC-FD
Chromatography	>0.3 µg/L	A52	Determination of Ochratoxin A in Wine and Beer by HPLC-Fluorescence Detector with Immunoaffinity Column Clean-up	HPLC-FD
Physical Property	>0.5% v/v	A17	Determination of Real Alcoholic Strength of Beverage Alcohol using Distillation and Electronic Densimetry	Densimeter
Physical Property		A32	Determination of Apparent Density and Specific Gravity at 20°C by Density Meter	Densimeter
Physical Property	>0.95% v/v	A49	Measurement of Apparent Alcoholic Strength by Volume Using Electronic Densimetry	Densimeter
Physical Property	0.1-200NTU	A33	Determination of Turbidity in Beverage Alcohol by Nephelometry	Turbidimeter
Physical Property	1-14	A34	Determination of pH in Alcoholic Beverages by pH Meter	pH Meter
Physical Property	>0.075 g/L	A26	Determination of Total Acidity in Wines by Titration to pH 8.2	pH Meter - Volumetric
Wet Chemistry	>130mg/L	A36	Determination of Volatile Acidity in Alcoholic Beverages Excluding Spirits and Liqueurs by Cash Still	Volumetric
Wet Chemistry	>9 mg/L	A41	Determination of Free and Total SO <sub>2</sub> in Wine by Titration (Ripper Method)	Volumetric
ICP-MS	>2 µg/L Cd, Co, Sb >10 µg/L As >20 µg/L Pb, Cu >40 µg/L Al, Zn	A45	Determination of Metals in Beverage Alcohol by ICP-MS	ICP-MS
ICP-MS	>2 µg/L Cd >20 µg/L Pb	A46	Determination of Lead and Cadmium Leached from Storage and Drinking Vessels by ICP-MS	ICP-MS



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ICP-MS	>2 µg/L Cd, Co >10 µg/L As >20 µg/L Pb	A47	Determination of Metals (As, Cd, Co, Pb) in Beverage Alcohol Requiring Acid Digestion by ICP-MS	ICP-MS
ICP-MS	>0.1% NaCl	A48	Determination of Sodium Chloride in Cooking Wines and Spirits by ICP-MS	ICP-MS

Notes:

- 1) This laboratory offers commercial testing service.



Approved by:  Date: October 3, 2007

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