Application Note

Determination of alcohol content in bourbon whiskey by Alcohol meter

Industry	:	Food and Beverage
Instrument	:	Alcohol meter
Measurement method	:	Resonant frequency oscillation

1. Scope

This is an example about determination of the alcohol content (vol%), specific gravity (t/t) and density (g/cm^3) in the bourbon whiskey. The alcohol meter can be used enough for determination of these applications on the bourbon whiskey making process.

Technical note: The alcohol sample must be distilled as per the procedure specified on local regulations before the alcohol content can be measured with this alcohol meter.

2. Apparatus

- Alcohol meter ALM-155
- Distillation apparatus

3. Sample

- Bourbon whiskey

4. Reagent

- Pure water for rinsing

5. Procedure

A: Alcohol content (vol%):

1) Take distilled sample solution into beaker
2) Introduce the sampling nozzle into the beaker
3) Press [Meas.] button on the instrument

B: Specific gravity (t/t) and Density (g/cm^3):

1) Take bourbon whiskey sample solution into beaker
2) Introduce the sampling nozzle into the beaker
3) Press [Meas.] button on the instrument

6. Measurement results

	Procedure A	Procedure B	
	Alcohol (vol%) at 20°C	S.G. (t/t)	Density (g/cm^3)
1	36.58	0.95031	0.94861
2	36.57	0.95033	0.94863
3	36.57	0.95033	0.94863
Mean	36.57	0.95032	0.94862
SD	0.01	0.00	0.00
RSD(%)	0.02	0.00	0.00