

Application Note

Measurement of density and specific gravity of isopropyl alcohol by Alcohol meter

Industry	:	Chemical
Instrument	:	Alcohol meter
Measurement method	:	Resonant frequency oscillation

1. Scope

This is an example about measurement of density and specific gravity of isopropyl alcohol. Isopropyl alcohol is used as a raw material for disinfection solution as with ethanol.

2. Apparatus

- Alcohol meter ALM-155



3. Sample

- Sample A: Isopropyl alcohol (Purity: 99.5%/ Special grade)
- Sample B: Mixed solvent (50mL Sample A + 50mL pure water)

4. Procedure

- 1) Place sampling nozzle into beaker.
- 2) Single click to load sample, measurement will start with final result being displayed automatically.

5. Measurement results

- Sample A -

	Density (g/cm ³) at 20°C	S.G. (t/t)
1	0.7860	0.7874
2	0.7827	0.7841
3	0.7827	0.7841
Mean	0.7838	0.7852
SD	0.00	0.00
RSD(%)	0.24	0.24

- Sample B -

	Density (g/cm ³) at 20°C	S.G. (t/t)
1	0.9168	0.9185
2	0.9284	0.9221
3	0.9288	0.9225
Mean	0.9247	0.9210
SD	0.01	0.00
RSD(%)	0.74	0.24