

Application Note

Measurement of density and specific gravity of isopropyl alcohol by Portable Density/ Specific Gravity Meter

Industry	:	Chemical
Instrument	:	Portable Density/ Specific Gravity 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


- Portable Density/ Specific Gravity Meter DA-130N



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) Slowly pull the sampling lever with the forefinger.
- 3) After the icon  is displayed, start measurement with [ok/meas.] key.

5. Measurement results

- Sample A -

	Density (g/cm ³)	S.G. (t/t)	Temperature (°C)
1	0.782	0.7830	22.9
2	0.781	0.7830	23.2
3	0.781	0.7837	22.8
Mean	0.781	0.7832	-
SD	0.00	0.00	-
RSD(%)	0.07	0.05	-

- Sample B -

	Density (g/cm ³)	S.G. (t/t)	Temperature (°C)
1	0.918	0.9203	23.3
2	0.918	0.9204	23.0
3	0.918	0.9200	23.2
Mean	0.918	0.9202	-
SD	0.00	0.00	-
RSD(%)	0.00	0.02	-