

Application Note

Determination of ethanol concentration in disinfection solution 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 determination of the ethanol concentration with volume percent in commercial disinfection solution. The alcohol meter can be used enough for determination of pure ethanol concentration on production process.

Note: this measurement result does not completely match the label value of disinfection solution because the commercial products contain additives like water, glycerin, etc.

2. Apparatus

- Portable Density/ Specific Gravity Meter DA-130N




3. Sample

- Disinfection solution

4. Reagent

- Pure water

5. 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.

6. Measurement results

	Alcohol (wt%)	Alcohol (vol%)	S.G. (t/t)	Density (g/cm ³)	Temperature (°C)
1	63.8	71.3	0.8843	0.883	19.3
2	63.8	71.3	0.8843	0.883	19.3
3	63.8	71.3	0.8843	0.883	19.3
Mean	63.8	71.3	0.8843	0.883	-
SD	0.00	0.00	0.00	0.00	-
RSD(%)	0.00	0.00	0.00	0.00	-