

Refractive Index Measurement

Kyoto Electronics Manufacturing Co., Ltd.

Data No. RV09-06061

Refractive Index of Premium Ethanol

-Summary-

As the result of studying the repeatability of the refractive index of premium ethanol by CHD-501N attached RA-520N, a good result was obtained with 0.00001 of S.D. (n=24)

-Measuring instrument-

Main unit : Refractometer	RA-520N
Option : Multiple sample unit	CHD-501N
Connecting kit for Refractometers	FCU-510

-Rinse solution-

Rinse 1: water
Rinse 2: acetone

-Measurement method-

- ① Set the measurement temperature at 20°C.
- ② Perform calibration with dried air and pure water, respectively.
- ③ Put the sample in vials and set them onto the turntable of CHD-501N.
- ④ Press [Meas.] key to start measuring the index of refraction of the sample.

-Equation-

No equation is used.

Ambient condition-

Temperature: 22.5 °C

Relative Humidity: 51%

Weather: Fine

-Reference-

-Measurement parameter-

[Measurement Parameter]			
Method No.	:	0	
Method Name	:	EtOH 100	
Temperature	:	20.00℃	
Stability	:	0	
Wait Time	:	0 s	
Sequence	:	On	
Sampling	:	Auto	
Samp. Limit	:	0 sec	
O.S. Rate	:	10 %	
Drain	:	Auto	
Drain Rate	:	200 %	
Rinse-1	:	Set	
Rinse-1 Time	:	10 s	
Rinse-2	:	Set	
Rinse-2 Time	:	10 s	
Purge	:	Set	
Purge Time	:	240 s	

-Printout data-

Result			
Sample No.	:	01-01	
Meas. Temp.	:	20.02 °C	
nD	:	1.36129	
Result			
Sample No.	:	01-02	
Meas. Temp.	:	20.02 °C	
nD	:	1.36129	
Result			
Sample No.	:	01-03	
Meas. Temp.	:	20.02 °C	
nD	:	1.36129	
Result			
Sample No.	:	01-04	
Meas. Temp.	:	20.01 °C	
nD	:	1.36129	

-Measurement results-

Run	Measured value	Run	Measured value	Statistics	
1	1.36129	13	1.36130	Mean	1.36129
2	1.36129	14	1.36128	SD	0.00001
3	1.36129	15	1.36128	RSD (%)	0.00066
4	1.36129	16	1.36130		
5	1.36129	17	1.36131		
6	1.36130	18	1.36128		
7	1.36129	19	1.36130		
8	1.36130	20	1.36129		
9	1.36129	21	1.36129		
10	1.36129	22	1.36131		
11	1.36130	23	1.36130		
12	1.36128	24	1.36128		

-Comments-

Nothing in particular.