

1. PERFORMANCE

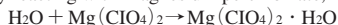
- 1) Measuring range : 1.7-33.8 mg/ℓ
- Number of pump strokes : 1 (100ml)
- From 10% RH (20°C = 68°F) to 100% RH (32°C = 90°F)
- [40% RH (40°C = 104°F)]
- 2) Sampling time : 20 seconds/1 pump stroke
- 3) Detectable limit : 0.2 mg/ℓ
- 4) Shelf life : 3 years
- 5) Operating temperature : 0 ~ 40°C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Direct reading from the scale calibrated by 1 pump stroke
- 8) Colour change : Greenish yellow → Purple

2. RELATIVE STANDARD DEVIATION

RSD-low : 10% RSD-mid. : 10% RSD-high : 5%

3. CHEMICAL REACTION

By reacting with Magnesium perchlorate, PH indicator is discoloured.



4. CALIBRATION OF THE TUBE

VAPOR PRESSURE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	%	Coexistence
Methanol		0.3	Unclear stain is produced.
Ethanol		0.3	∕
Ethyl acetate		0.3	∕
Acetone		0.5	∕
Nitrogen dioxide		0.2	∕
Ammonia		0.02	Purple and purplish red stains are produced and higher readings are given.

TEMPERATURE CORRECTION TABLE

Tube Readings	Corrected Concentration																	
	0°C 32°F	5°C 41°F	10°C 50°F	12°C 54°F	14°C 57°F	16°C 61°F	18°C 64°F	20°C 68°F	22°C 72°F	24°C 75°F	26°C 79°F	28°C 82°F	30°C 86°F	32°C 90°F	34°C 93°F	36°C 97°F	38°C 100°F	40°C 104°F
0	100.0 4.8	50.0 3.4	30.0 2.8	20.0 2.1	18.0 2.2	15.0 2.0	12.0 1.8	10.0 1.7	9.0 1.7	8.0 1.7	7.5 1.8	7.0 1.9	6.5 2.0	6.0 2.0	5.5 2.1	5.0 2.1	5.0 2.3	4.0 2.0
5		100.0 6.8	50.0 4.7	30.0 3.2	26.0 3.1	20.0 2.7	18.0 2.8	15.0 2.5	12.0 2.3	9.0 2.0	8.0 2.2	7.5 2.3	7.0 2.4	6.5 2.4	6.0 2.4	5.5 2.5	5.0 2.5	5.0 2.6
10			100.0 9.4	70.0 7.5	48.0 5.8	35.0 4.8	28.0 4.3	24.0 4.2	18.0 3.5	15.0 3.3	13.0 3.2	10.0 2.7	9.0 2.7	8.5 2.9	8.0 3.0	7.5 3.1	7.0 3.2	6.5 3.3
12				100.0 10.7	80.0 9.6	50.0 8.9	40.0 8.5	30.0 8.1	25.0 7.9	20.0 7.6	17.0 7.5	14.0 7.4	12.0 7.3	10.0 7.2	9.5 7.1	9.0 7.0	8.0 6.9	7.0 6.8
14					100.0 12.0	80.0 10.9	50.0 10.9	40.0 10.9	35.0 10.9	26.0 10.9	20.0 10.9	18.0 10.9	15.0 10.9	14.0 10.9	13.0 10.9	11.0 10.9	10.0 10.9	9.0 10.9
16						100.0 13.6	80.0 12.3	50.0 11.6	45.0 11.6	35.0 11.6	27.0 11.6	21.0 11.6	18.0 11.6	15.0 11.6	14.0 11.6	12.0 11.6	11.0 11.6	10.0 11.6
18							100.0 15.4	80.0 13.8	50.0 13.8	45.0 13.8	35.0 13.8	27.0 13.8	22.0 13.8	19.0 13.8	17.0 13.8	15.0 13.8	13.0 13.8	12.0 13.8
20								100.0 17.2	80.0 15.5	60.0 15.5	48.0 15.5	38.0 15.5	29.0 15.5	24.0 15.5	20.0 15.5	18.0 15.5	16.0 15.5	14.0 15.5
22									100.0 19.4	80.0 17.4	60.0 17.4	50.0 17.4	40.0 17.4	30.0 17.4	25.0 17.4	22.0 17.4	19.0 17.4	17.0 17.4
24										100.0 21.8	80.0 19.5	60.0 19.5	50.0 19.5	40.0 19.5	30.0 19.5	25.0 19.5	22.0 19.5	19.0 19.5
26											100.0 24.4	80.0 21.8	60.0 21.8	50.0 21.8	40.0 21.8	32.0 21.8	28.0 21.8	25.0 21.8
28												100.0 27.2	80.0 24.2	60.0 24.2	50.0 24.2	40.0 24.2	32.0 24.2	28.0 24.2
30													100.0 30.3	80.0 27.0	60.0 27.0	50.0 27.0	40.0 27.0	34.0 27.0
32														100.0 33.8	80.0 30.1	60.0 30.1	48.0 30.1	40.0 30.1