

1. PERFORMANCE

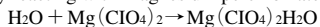
- 1) Measuring range : 1.7-33.8 mg/ℓ
 Number of pump strokes : 1 (100mℓ)
 From 10 % RH (20 °C = 68 ° F) to 100 % RH (32 °C = 90 ° F)
 [40 % RH (40 °C = 104 ° F)]
- 2) Sampling time : 20 seconds/1 pump stroke
- 3) Detectable limit : 0.2 mg/ℓ
- 4) Shelf life : 3 years
- 5) Operating temperature : 0 ~ 40 °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	ppm	Coexistence
Methanol		0.3%	Unclear stain is produced.
Ethanol		0.3%	∕
Ethyl acetone		0.3%	∕
Acetone		0.5%	∕
Ammonia		0.2%	Purple and purplish red stains are produced and higher readings are given.
Nitrogen dioxide		0.2%	Unclear stain is produced.

TEMPERATURE CORRECTION TABLE

Scale Readings	True 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	50	30	20	18	15	12	10	9	8	7.5	7	6.5	6	5.5	5	5	4	
	4.8	3.4	2.8	2.1	2.2	2.0	1.8	1.7	1.7	1.7	1.8	1.9	2.0	2.0	2.1	2.1	2.1	2.3	2.0
5		100	50	30	26	20	18	15	12	9	8	8	7.5	7	6.5	6	5.5	5	
		6.8	4.7	3.2	3.1	2.7	2.8	2.5	2.3	1.9	2.0	2.2	2.3	2.4	2.4	2.5	2.5	2.5	2.6
10			100	70	48	35	28	24	18	15	13	10	9	8.5	8	7.5	7		
			9.4	7.5	5.8	4.8	4.3	4.2	3.5	3.3	3.2	2.7	2.7	2.9	3.0	3.1	3.2	3.3	3.3
12				100	80	50	40	30	25	20	17	14	12	10	9.5	9	8	6	
				10.7	9.6	6.8	6.2	5.2	4.9	4.4	4.1	3.8	3.6	3.4	3.6	3.8	3.5	3.1	3.1
14					100	80	55	40	35	26	20	18	15	13	11	10	9	9	
					12.0	10.9	8.5	6.9	6.8	5.7	4.9	4.9	4.5	4.4	4.1	4.2	4.2	4.6	4.6
16						100	80	55	45	35	26	20	18	15	13	11	9	9	
						13.6	12.3	9.5	8.7	7.6	6.6	5.7	5.5	5.4	5.3	5.0	5.1	5.1	5.1
18							100	80	55	45	35	27	22	19	17	15	13	12	
							15.4	13.8	10.7	9.8	8.5	7.3	6.7	6.4	6.4	6.3	6.0	6.1	6.1
20								100	80	60	48	38	29	24	20	18	16	14	
								17.2	15.5	13.1	11.7	10.3	8.8	8.1	7.5	7.4	7.2	7.2	7.2
22									100	80	62	50	40	30	25	22	19	17	
									19.4	17.4	15.1	13.6	12.1	10.1	9.4	9.2	8.8	8.7	8.7
24										100	80	62	50	40	30	27	23	20	
										21.8	19.5	16.9	15.2	13.5	11.3	11.3	10.6	10.2	10.2
26											100	80	64	50	40	32	28	25	
											24.4	21.8	19.4	17.0	15.0	13.3	12.9	12.8	12.8
28												100	80	64	50	40	32	28	
												27.1	24.2	21.6	18.8	16.7	14.8	14.3	14.3
30													100	80	64	50	40	34	
													30.3	27.0	24.1	20.1	18.5	17.4	17.4
32														100	80	64	48	40	
														33.8	30.1	26.7	22.2	20.4	20.4