

1. PERFORMANCE

- 1) Measuring range : 0.5-25.0 ppm
Number of pump strokes : 2 (200mℓ)
- 2) Sampling time : 3 minutes/2 pump strokes
- 3) Detectable limit : 0.3 ppm
- 4) Shelf life : 2 years
- 5) Operating temperature : 10 ~ 40 °C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Direct reading from the scale calibrated by 2 pump strokes
- 8) Colour change : Pale yellow → Pale brown

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Cresol is oxidized and the polymer is produced.



4. CALIBRATION OF THE TUBE

ABSORPTIOMETRIC METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Phenols FIG.1	Similar stain is produced.	2.5	Higher readings are given.
Ammonia FIG.2	White stain is produced.	200	Discolouration of gas inlet side is faded and higher reading are given.
Aliphatic amines	∕	50	∕
Aromatic amines	Blue stain is produced.	50	Two layers discolouration of Pale brown and blue are produced and higher reading are given.

(NOTE)

This tube scale is calibrated based on Phenol and the same scale is available for Cresol.

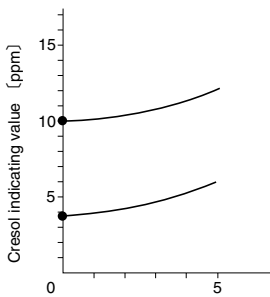


FIG.1 Influence of Phenol

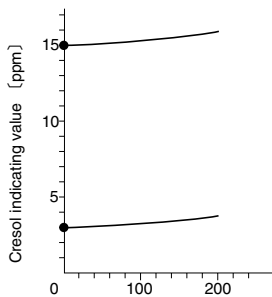


FIG.2 Influence of Ammonia

TEMPERATURE CORRECTION TABLE

Scale Readings (ppm)	True Concentration (ppm)				
	10 °C (50 ° F)	15 ° C (59 ° F)	20 ° C (68 ° F)	30 ° C (95 ° F)	40 ° C (104 ° F)
25.0	31.2	27.8	25.0	21.8	18.8
20.0	24.5	22.3	20.0	17.5	15.0
15.0	18.4	16.7	15.0	13.1	11.3
10.0	12.3	11.1	10.0	8.8	7.5
5.0	6.1	5.6	5.0	4.4	3.8
3.0	3.7	3.3	3.0	2.6	2.3
1.0	1.2	1.1	1.0	0.9	0.8
0.5	0.5	0.5	0.5	0.5	0.5