FORMALDEHYDE

DETECTOR TUBE



1. PFRFORMANCE

3) Detectable limit : 0.005 ppm (300mLx30min)

4) Shelf life : 1 year (Necessary to store in refrigerated conditions; $0\sim10^{\circ}$ C)

5) Operating temperature : $10\sim35^{\circ}$ C

6) Temperature compensation: Necessary (See "TEMPERATURE CORRECTION TABLE")

7) Reading Direct reading from the scale calibrated at the sampling of 300mLx30min

8) Colour change \Rightarrow Red

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By reacting with Hydroxylamine sulphate, Sulphuric acid is liberated. $HCHO + (NH_3OH)_2SO_4 \rightarrow H_2SO_4 + HCN = NOH + H_2O$

4. CALIBRATION OF THE TUBE

ABSORPTIOMETRIC METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm	Interference		Coexistence		
Ammonia		The accuracy of readings is not affected.	0.5	Discolouration layer fades from the bottom of stained layer.		
Amines		"	0.5	"		
Nitrogen dioxide	0.5	Similar stain is produced.	0.5	Higher readings with unclear maximum point of stained layer are given.		
Acetaldehyde		″		Higher readings are given.		
Acetone		//		//		

(NOTE)

Air sampler is required for this tube.

TABLE OF THE COEFFICIENT FOR TEMPERATURE CORRECTION (20°C standard)

Temp (°C)	0	1	2	3	4	5	6	7	8	9
10	1.16	1.14	1.13	1.11	1.10	1.08	1.06	1.05	1.03	1.02
20	1.00	0.98	0.97	0.95	0.94	0.92	0.90	0.89	0.87	0.86
30	0.84	0.82	0.81	0.79	0.78	0.76	-	-	-	-