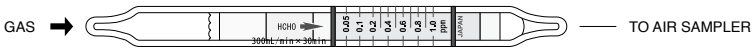
Tube No.
710A

FORMALDEHYDE



1. PERFORMANCE

1) Measuring range	: 0.10-2.0 ppm (125 -2,500 μ g/m^3)	0.05-1.0 ppm (62 - 1,250 μ g/m^3)
2) Sampling volume	: 4.5L (300mL/min×15min)	9L (300mL/min×30min)
3) Sampling time	: 15 minutes	30 minutes
4) Detectable limit	: 0.005 ppm (300mL/min×30min)	
5) Shelf life	: 1 year (Necessary to store in refrigerated conditions ; 0～10℃)	
6) Operating temperature	: 10～35℃	
7) Temperature compensation	: Necessary (See "TEMPERATURE CORRECTION COEFFICIENT TABLE")	
8)Operating humidity	: 10～90%R.H.	
9) Reading	: Direct reading from the scale calibrated at the sampling of 300mL/min×30min	
10) Colour change	: Yellowish orange→ Pink	

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

DNPH-HPLC METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm	Interference	ppm	Coexistence
Ammonia	—	The accuracy of readings is not affected.	0.5	Discolouration layer fades from the inlet side of the stain.
Amines	—	〃	0.5	〃
Nitrogen dioxide	0.5	Similar stain is produced.	0.5	Higher readings with indiscernable maximum end point of the stain are given.
Acetaldehyde	—	〃	—	Higher readings are given.
Acetone	—	〃	—	〃

(NOTE)

1) Air sampler is required for this tube.
2) In case of 4.5L sampling, following formula is available for the actual concentration.
   Actual concentration = 2×Temperature corrected value

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

Temp(℃)	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	—	—	—	—