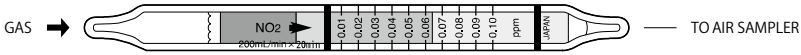
Tube No.
740

NITROGEN DIOXIDE



1. PERFORMANCE

1) Measuring range : 0.01-0.10 ppm 0.02-0.20 ppm
2) Sampling time : 200mL/min ×20min 200mL/min ×10min
3) Detectable limit : 0.002 ppm(at the sampling of 200mL/min×20min)
4) Shelf life : 2 years
5) Operating temperature : 0～40℃
6) Temperature compensation : Necessary (30～40℃) (See "TEMPERATURE CORRECTION TABLE")
7) Operating humidity : 5～90%R.H. at 20～40℃
20～90%R.H. at 0～20℃
7) Reading : Direct reading from the scale calibrated at the sampling of 200mL/min ×20min
8) Colour change : White → Redish purple

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By reacting with 3,3'-Dimethylnaphthidine, Nitroso compound is produced.

$NO_2 + C_{22}H_{20}N_2 \rightarrow$ Purple red reaction products

4. CALIBRATION OF THE TUBE

PERMEATION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Sulphur dioxide		0.3	Lower readings are given.
Ozone		0.2	〃
Carbon monoxide			The accuracy of readings is not affected.
Carbon dioxide			〃
Nitrogen monoxide			〃
Formaldehyde			〃
Toluene			〃
Xylene			〃
Ethyl benzene			〃
Styrene			〃
p-Dichlorobenzene			〃
Acetone			〃

(NOTE)

Air sampler is required for this tube.

TABLE OF THE COEFFICIENT FOR TEMPERATURE CORRECTION

Temperature(℃)	0	1	2	3	4	5	6	7	8	9
0	0.90	0.90	0.91	0.91	0.92	0.92	0.93	0.93	0.94	0.94
10	0.95	0.95	0.96	0.96	0.97	0.97	0.98	0.98	0.99	0.99
20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
30	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.16	1.18
40	1.20	-	-	-	-	-	-	-	-	-