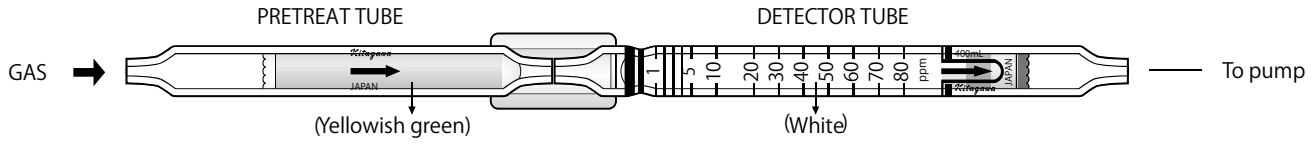
Tube No.
118SE

BENZENE



1. PERFORMANCE

1) Measuring range : 1-80 ppm 0.2-1 ppm
   Number of pump strokes 1(100mL) 5(500mL)
2) Sampling time : 2 minutes/1 pump stroke
3) Detectable limit : 0.1 ppm(500mL)
4) Shelf life : 2 years
5) Operating temperature : 0～40℃
6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
7) Reading : Direct reading from the scale calibrated by 1 pump stroke
8) Colour change : White → Brown

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Iodine pentoxide is reduced.

$C_6H_6 + I_2O_5 + H_2SO_4 \cdot nSO_3 \rightarrow I_2$

4. CALIBRATION OF THE TUBE

DIFFUSION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Toluene	Similar stain is produced.	1000(100mL)	Higher readings are given.
Xylene	〃	〃	〃
Ethyl benzene	〃	〃	〃
Toluene	Similar stain is produced.	200(500mL)	Higher readings are given.
Xylene	〃	〃	〃
Ethyl benzene	〃	〃	〃
Carbon monoxide		2	Whole reagent is changed to Pale brown, indiscernible stain is produced and higher readings are given.
Hexane		〃	Very light brown is produced.

TEMPERATURE CORRECTION TABLE

Temperature ; To correct for temperature, multiply the tube reading by the following factors.

＊Temperature correction is not necessary at 10ppm or less.

Temperature (℃)	0	1	2	3	4	5	6	7	8	9
Correction Factor	1.10	1.10	1.09	1.09	1.08	1.08	1.07	1.07	1.06	1.06
Temperature (℃)	10	11	12	13	14	15	16	17	18	19
Correction Factor	1.05	1.05	1.04	1.04	1.03	1.03	1.02	1.02	1.01	1.01
Temperature (℃)	20	21	22	23	24	25	26	27	28	29
Correction Factor	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.08	1.09
Temperature (℃)	30	31	32	33	34	35	36	37	38	39
Correction Factor	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19
Temperature (℃)	40									
Correction Factor	1.20									