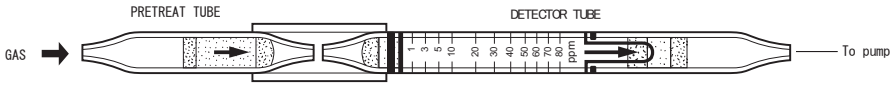
Tube No.
118SE

BENZENE



1. PERFORMANCE

1) Measuring range : 1-80ppm 0.2-1ppm
   Number of pump strokes 1(100mL) 5(500mL)
2) Sampling time : 2 minutes/1 pump stroke
3) Detectable limit : 0.1ppm(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 5 pump strokes
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.

$C_6H_6 + I_2O_5 + H_2SO_4 \rightarrow I_2$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Toluene	Similar stain is produced.	1000	Higher readings are given.
Xylene	"	"	"
Ethyl benzene	"	"	"
Carbon monoxide		2	Whole reagent is changed to Pale brown, unclear stain are produced and higher reading s are given.
Hexane		"	Discolours to very light brown.

TEMPERATURE CORRECTION TABLE

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

Temperature(℃)	0	1	2	3	4	5	6	7	8	9
Correction Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Temperature(℃)	10	11	12	13	14	15	16	17	18	19
Correction Factor	0.66	0.70	0.73	0.76	0.79	0.83	0.86	0.89	0.93	0.96
Temperature(℃)	20	21	22	23	24	25	26	27	28	29
Correction Factor	1.00	1.04	1.08	1.11	1.15	1.19	1.23	1.27	1.31	1.35
Temperature(℃)	30	31	32	33	34	35	36	37	38	39
Correction Factor	1.40	1.44	1.48	1.53	1.57	1.62	1.66	1.71	1.71	1.71
Temperature(℃)	40									
Correction Factor	1.71									