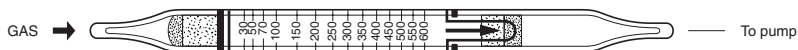


Tube No.
168SB

1,3-BUTADIENE



1. PERFORMANCE

- 1) Measuring range : 30-600 ppm
Number of pump strokes : 1 (100mℓ)
- 2) Sampling time : 1.5 minutes/ 1 pump stroke
- 3) Detectable limit : 5 ppm
- 4) Shelf life : 3 years
- 5) Operating temperature : 0 ~ 40 °C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Direct reading from the scale calibrated by 1 pump stroke
- 8) Colour change : Pale yellow → White

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Molybdate is reduced and molybdeum blue is produced.



4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence
Carbon monoxide	Whole layer is discoloured to Green or Blue.	
Hydrogen sulphide	Black stain is produced.	
Saturated Hydrocarbons (more than C ₃)	Whole layer is discoloured to Blue.	
Ethylene	Blue stain is produced.	
Propylene	∕	
Butylene	∕	
Benzene	Yellowish orange stain is produced.	
Ammonia	Similar stain is produced.	Higher readings are given.
Hydrogen cyanide	∕	∕

TEMPERATURE CORRECTION TABLE

Tube Readings (ppm)	Corrected Concentration (ppm)				
	0 °C (32 °F)	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)	40 °C (104 °F)
600	910	740	600	550	510
550	820	670	550	510	470
500	740	600	500	460	430
450	650	530	450	420	390
400	570	470	400	370	350
350	490	400	350	330	310
300	410	340	300	280	270
250	330	280	250	240	220
200	250	220	200	190	180
150	180	160	150	140	140
100	110	110	100	100	90