Tube No.
168SA 1,3-BUTADIENE



1. PERFORMANCE

1) Measuring range : 0.03-2.6 %
   Number of pump strokes 1 (100mℓ)
2) Sampling time : 1.5 minutes/1 pump stroke
3) Detectable limit : 0.001 % (10 ppm)
4) Shelf life : 3 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 : Brownish orange → Dark brown

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromium oxide is reduced.

$CH_2 = CHCH = CH_2 + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Acetylene	Whole regent is discoloured to Brown.	3 %	Higher readings are given.
Propane	〃	0.2 %	〃
Other organic gases or vapours except Halogenated hydrocarbons	Similar stain is produced.	50	〃

TEMPERATURE CORRECTION TABLE

Tube Readings (%)	Corrcted Concentration (%)				
	0 ℃ (32 ℉)	10 ℃ (50 ℉)	20 ℃ (68 ℉)	30 ℃ (86 ℉)	40 ℃ (104 ℉)
2.6	3.3	3.0	2.6	2.5	2.4
2.4	3.0	2.7	2.4	2.3	2.2
2.2	2.7	2.5	2.2	2.1	2.0
2.0	2.4	2.2	2.0	1.9	1.8
1.8	2.1	2.0	1.8	1.8	1.7
1.6	1.9	1.8	1.6	1.6	1.5
1.4	1.6	1.5	1.4	1.4	1.3
1.2	1.4	1.3	1.2	1.2	1.1
1.0	1.1	1.1	1.0	1.0	0.9
0.8	0.9	0.8	0.8	0.8	0.7
0.6	0.7	0.6	0.6	0.6	0.6
0.4	0.4	0.4	0.4	0.4	0.4