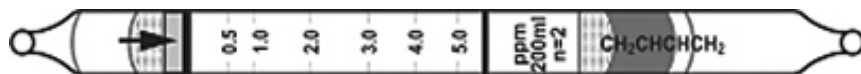


1,3-Butadiene $\text{CH}_2=\text{CHCH}=\text{CH}_2$ No. H-10-135-04



	Extended Range	Standard Range	Extended Range
Range (ppmv)	0.25-2.5	0.5-5	1-10
No. of Pump Strokes	4	2	1
Sample Volume (mL)	400	200	100
Sample Time (min)	4 x 2	2 x 2	2
Correction Factor	0.43	1	2.4

Precision (Relative Standard Deviation)*: $\leq \pm 15\%$

Linearity with No. of Pump Strokes: $r^2 > 0.998$

Humidity Range: no effect 0 - 90% RH.

Temperature Range: 0 - 40°C (32 - 104°F)

Temp (°C/°F)	0/32	10/50	20/68	30/86	40/104
Corr. Factor	1.5	1.15	1.0	0.85	0.8

Storage Life: 2 years in darkness below 10°C (50°F). Refrigeration required.

Color Change: Pink → White

Reaction Principle: $\text{CH}_2=\text{CHCH}=\text{CH}_2 + \text{KMnO}_2 \rightarrow \text{Oxidation products}$

Cross-sensitivity: Substance	Concentration (ppmv)	Apparent Reading*
Isobutylene	5	4.4
Ethylene	10	0**
Hexane	100	0
Toluene	100	0
CH_4	75000	0
CO_2	4000	0
CO	400	0
H_2S	30	0
SO_2	5	0.5
NO	8	1.9
NO_2	10	0.5
NH_3	50	0
HCN	10	0

*Data based on Honeywell and tubes used in standard range.

** The entire tube changes to very light pink, no boundary.

Caution: Dispose of spent or expired tubes according to local regulations.

Possibly hazardous materials are given under the section Reaction Principle.