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# Gas Detection Tube Data Sheet

## Methyl Bromide CH<sub>3</sub>Br No. 10-131-10

	Extended Range	Standard Range	Extended Range
Range (ppmv)	0.5-9	1-18	2-36
No. of Pump Strokes	4	2	1
Sample Volume (mL)	400	200	100
Sample Time (min)	4 x 3	2 x 3	3
Correction Factor	0.48	1.0	2.1

Precision (Relative Standard Deviation)\*:  $\leq \pm 20\%$

Linearity with No. of Pump Strokes:  $r^2 = 0.997$

Humidity: No effect 5 - 100% RH

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

Temp (°C/°F)	0/32	10/40	25/77	40/104
Corr. Factor	1.5	1.3	1.0	0.95

Storage Life: 2 years in darkness at 5 - 25°C (40 - 77°F). Refrigeration preferred.

Color Change: White → Orange

Reaction Principle: Pre-tube :  $\text{CH}_3\text{Br} + \text{K}_2\text{Cr}_2\text{O}_7 + \text{H}_2\text{SO}_4 \rightarrow \text{Br}_2 + \text{Other Prods}$

Measurement Tube:  $\text{Br}_2 + \text{indicator dye} \rightarrow \text{Orange product}$

Cross-sensitivity: Substance	Concentration (ppmv)	Apparent Reading*
Tetrachloroethylene	200	13
Trichloroethylene	100	4
Vinylidene Chloride	200	47
Vinyl Chloride	200	5
3-Chloro-2-Methylpropene	200	4
1,2-Dichloroethane	200	0
1,1,1- Trichloroethane	50	4.5
Cl <sub>2</sub>	10	21
NO	500	0.6
NO <sub>2</sub>	570	1.0
CH <sub>4</sub>	25000	0
CO	500	0
CO <sub>2</sub>	5000	0
Isobutylene	100	0
Hexane	1200	0

\*Data based on RAE pumps and tubes used in standard range.

Other Possible Interferences: No response to 500 ppm propane.

Caution: Dispose of spent or expired tubes according to local regulations.  
Possibly hazardous materials are given under the section Reaction Principle.