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# Gas Detection Tube Data Sheet

## Hydrogen Sulfide H<sub>2</sub>S No. 10-103-50

	Extended Range	Extended Range	Standard Range
Range (ppmv)	0.5 - 10%	1 - 20%	2 - 40%
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 1.5	1.5	1.5
Correction Factor	0.25	0.5	1

Precision (Relative Standard Deviation)\*:  $\leq \pm 10\%$

Linearity with No. of Pump Strokes:  $r^2 = 0.999$

Humidity: No effect 5 - 85% RH

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

Temp (°C/°F)	0/32	10/50	18/64	40/104
Corr. Factor	0.75	1.0	1.0	1.0

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

Color Change: Light Blue → Black

Reaction Principle:  $H_2S + CuSO_4 \rightarrow CuS + H_2SO_4$

<u>Cross-sensitivity:</u> Substance	Concentration (ppmv)	Apparent Reading*
CO	250	0
CO <sub>2</sub>	5%	0
NO	100	0
NH <sub>3</sub>	10%	3.5% (blue)
CH <sub>4</sub>	2.5%	0
SO <sub>2</sub>	10	0
Isobutylene	100	0
Hexane	100	0
Benzene	100	0
Toluene	100	0

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

Other Possible Interferences: Mercaptans. No response to sulfides.

Note: Time measurement to exactly 1.5 minutes for best accuracy.

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