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# Gas Detection Tube Data Sheet

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

	Extended Range	Standard Range	Extended Range
Range (ppmv)	1.25 - 30	2.5 - 60	5 - 120
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 1.5	1.5	1
Correction Factor	0.5	1	2

Precision (Relative Standard Deviation)\*:  $\leq \pm 12\%$

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

Humidity: No effect 5 - 85% RH

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

Temp (°C/°F)	0/32	10/50	25/77	40/104
Corr. Factor	0.95	0.95	1.0	1.2

Storage Life: 1 year in darkness at 5 - 25°C (40 - 77°F). Refrigeration preferred.

Color Change: White → Light Brown

Reaction Principle:  $H_2S + Pb(OAc)_2 \rightarrow PbS + 2HOAc$

Cross-sensitivity: Substance	Concentration (ppmv)	Apparent Reading*
H <sub>2</sub>	100%	0 <sup>^</sup>
CO	250	0
CH <sub>4</sub>	25000	0
NH <sub>3</sub>	300	0
NO <sub>2</sub>	200	0 <sup>‡</sup>
SO <sub>2</sub>	20	0
SO <sub>2</sub>	1800	0 <sup>†</sup>
CS <sub>2</sub>	100	0
Methyl mercaptan	100	0 <sup>#</sup>
Diethyl sulfide	100	0
Hexane	100	0
Isobutylene	100	0 <sup>^</sup>
Toluene	100	0

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

<sup>^</sup> No effect in mixtures.

<sup>‡</sup> Interferes in mixtures; may result in transient light brown H<sub>2</sub>S response.

<sup>†</sup> Interferes in mixtures; high SO<sub>2</sub> concentrations suppress H<sub>2</sub>S response.

<sup>#</sup> Concentrations in the high % range leave a yellow color over the entire tube.

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