



RAE Systems, Inc.  
1339 Moffett Park Dr.  
Sunnyvale, CA 94089 USA

Telephone 408-752-0723  
Tube Orders 1-888-723-8823  
Web www.raesystems.com

# Gas Detection Tube Data Sheet

## Hydrogen Sulfide H<sub>2</sub>S No. 10-103-18

	Extended Range	Standard Range	Extended Range
Range (ppmv)	12.5 - 125	25 - 250	50 - 500
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 1	1	1
Correction Factor	0.5	1	2

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

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	23/73	40/104
Corr. Factor	0.9	0.9	1.0	1.1

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

Color Change: White → Brown

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

Cross-sensitivity: Substance	Concentration (ppmv)	Apparent Reading*
CO	250	0
CH <sub>4</sub>	25000	0
NH <sub>3</sub>	100	0
NO <sub>2</sub>	200	0 <sup>‡</sup>
CS <sub>2</sub>	100	0
Methyl mercaptan	500	0 <sup>#</sup>
Diethyl sulfide	100	0
Isobutylene	100	0
Toluene	100	0

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

<sup>‡</sup> Interferes in mixtures; may result in transient brown 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.