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# Gas Detection Tube Data Sheet

## Hydrogen Sulfide H<sub>2</sub>S No. 10-103-20

	Extended Range	Standard Range	Extended Range
Range (ppmv)	25 - 400	50 - 800	100 - 1600
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 2	2	1.5
Correction Factor	0.5	1	2

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

Linearity with No. of Pump Strokes:  $r^2 = 0.989$

Humidity: 80% RH reduces the reading by about 10% compared to dry air

<u>Temperature Range:</u> 0 - 40°C (32 - 104°F)	Temp (°C/°F)	0/32	10/50	25/77	40/104
	Corr. Factor	1.0	1.0	1.0	1.2

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

Color Change: White → Dark Brown

Reaction Principle: H<sub>2</sub>S + Pb(OAc)<sub>2</sub> → PbS + 2HOAc

<u>Cross-sensitivity:</u> Substance	Concentration (ppmv)	Apparent Reading*
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
CS <sub>2</sub>	100	0
Methyl mercaptan	500	<50
Diethyl sulfide	1000	0
Hexane	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.

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