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Gas Detection Tube Data Sheet

Hydrogen Sulfide H₂S No. 10-103-40

	Extended Range	Standard Range	Extended Range
Range (ppmv)	0.05 - 1%	0.1 - 2%	0.2 - 4%
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: $r^2 = 0.998$

Humidity: No effect 5 - 85% RH

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

Temp (°C/°F)	0/32	18/64	25/77	40/104
Corr. Factor	1.2	1.1	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: $H_2S + CuSO_4 \rightarrow CuS + H_2SO_4$

Cross-sensitivity: Substance	Concentration (ppmv)	Apparent Reading*
CO	3000	0
CH ₄	25000	0
NO	100	0
NO ₂	200	0
NH ₃	300	0
SO ₂	20	0
Methyl mercaptan	0.1%	0.1%#
Diethyl sulfide	1000	0
Isobutylene	100	0
Toluene	100	0
Hexane	1200	0

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

Concentrations in the high % range leave a yellow color over the entire tube.

Other Possible Interferences: High Concentrations of ammonia; NO₂ in mixtures.

No response to CS₂.

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