Gas Detection Tube Data Sheet Hydrogen Sulfide H₂S 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)*: ≤ ± 10%

<u>Linearity with No. of Pump Strokes</u>: $r^2 = 0.999$

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: H₂S + CuSO₄ → CuS + H₂SO₄

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

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