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# Gas Detection Tube Data Sheet

## Hydrogen Chloride HCl No. 10-108-09

	Extended Range	Standard Range	Extended 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	1	0.5
Correction Factor	0.5	1	2

Precision (Relative Standard Deviation)\*:  $\leq \pm 20\%$

Linearity with No. of Pump Strokes:  $r^2 = 0.999$

Humidity: Must be used @ <5% RH. Reading drops sharply above 5% RH.

Temperature Range: No effect between 0 - 40°C (32 - 104°F) at <5%RH.

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

Color Change: Yellow → Pink

Reaction Principle: HCl + Base → Chloride Salt + H<sub>2</sub>O (dye color change)

<u>Cross-sensitivity:</u> Substance	Concentration (ppmv)	Apparent Reading*
CO	15,000	0
CO <sub>2</sub>	8,000	0
H <sub>2</sub> S	800	0
SO <sub>2</sub>	200	0
NO	100	0
NO <sub>2</sub>	200	20
NH <sub>3</sub>	100	0
HF	25	15
Cl <sub>2</sub>	20	0
CH <sub>4</sub>	25,000	0
Hexane	2400	0
Toluene	400	0

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

Other Possible Interferences: Other acid vapors; amines and other bases.

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