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Gas Detection Tube Data Sheet

Vinyl Chloride $\text{CH}_2=\text{CHCl}$ No. 10-128-10

	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 3	3	3
Correction Factor	0.42	1.0	2.2

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

Linearity with No. of Pump Strokes: $r^2 = 0.991$

Humidity: No effect 5 - 100% RH

<u>Temperature Range:</u> 0 - 40°C (32 - 104°F)	Temp (°C/°F)	0/32	10/50	25/77	40/104
	Corr. Factor	2.5	1.3	1.0	0.8

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

Color Change: Yellow → Purple

Reaction Principle: Pretube: $\text{C}_2\text{H}_3\text{Cl} + \text{K}_2\text{Cr}_2\text{O}_7 + \text{H}_2\text{SO}_4 \rightarrow \text{HCl} + \text{Other Prods}$

Measurement Tube: $\text{HCl} + \text{indicator dye} \rightarrow \text{reddish purple color}$

<u>Cross-sensitivity:</u> Substance	Concentration (ppmv)	Apparent Reading*
1,3-Dichloropropylene	20	20
1,1-Dichloroethylene	10	16
Trichloroethylene	10	3.5
Tetrachloroethylene	60	1.5
Ethyl Chloroformate	40	0.4
Methyl Chloroformate	120	0.1
1,2-Dichloroethane	100	0
Methyl chloride	2000	0
Chloroform	100	0
Ethylene	1000	0
Benzene	600	0
Toluene	600	0
CO	500	0
CO ₂	5000	0

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

Other Possible Interferences: HCl; other chlorinated olefins. No response to 25000 ppm CH₄, 500 ppm propane, 100 ppm isobutylene or 1200 ppm hexane.

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