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Gas Detection Tube Data Sheet

Carbon Monoxide CO No. 10-102-30

	Extended Range	Standard Range	Extended Range
Range (ppmv)	10-250	20 - 500	40 - 1000
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 1.5	1.5	1
Correction Factor	0.5	1	2

Precision (Relative Standard Deviation)*: $\leq \pm 12\%$

Linearity with No. of Pump Strokes: $r^2 > 0.99$

Humidity: No effect 0~95% RH.

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

Temp (°C/°F)	0/32	10/50	25/77	40/104
Corr. Factor	0.75	0.91	1.00	1.15

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

Color Change: White → Light Blue (Over-range Yellow → Green)

Reaction Principle: $5CO + I_2O_5 + H_2S_2O_7 \rightarrow I_2 + CO_2 + \text{Sulfur products}$

<u>Cross-sensitivity:</u> Substance	Concentration (ppmv)	Apparent Reading*
NO	100	40
H ₂ S	50	2
NH ₃	300	0
CH ₄	25000	0
Hexane	100	23
Isobutylene	100	3
Toluene	100	0
Trichloroethylene	25	43

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

Other Sensitivity Data: Hydrocarbons and similar reducing gases. Most hydrocarbon interferences can be eliminated using a pretreatment tube such as p/n 025-2000-010 VOC zeroing tubes. Methane does not interfere in mixtures.

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