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Gas Detection Tube Data Sheet Carbon Monoxide CO No. 10-102-45

	Extended Range	Extended Range	Standard Range
Range	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 1.5	1.5	1
Correction Factor	0.25	0.5	1

Precision (Relative Standard Deviation)*: ≤ ± 10%

<u>Linearity with No. of Pump Strokes</u>: $r^2 = 0.99$

Humidity: No effect 5 - 100% RH.

Temperature Range: 0 - 40°C

(32 - 104°F)

Temp (°C/°F)	0/32	10/50	25/77	40/104
Corr. Factor	1.0	1.0	1.0	1.1

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

Color Change: White → Dark Brown

Reaction Principle: 5CO + KIO₃ + $H_2SO_4 \rightarrow I_2$ + CO_2 + sulfur products

Cross-sensitivity: Substance	Concentration (ppmv)	Apparent Reading*
H ₂ S	100	0
NH ₃	300	0
CH ₄	25000	0
Hexane	1200	0
Isobutylene	100	0
Toluene	100	0

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

Other Possible Interferences: Hydrocarbons and similar reducing gases. Most hydrocarbon interferences can be eliminated using a pretreatment tube. 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.