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Gas Detection Tube Data Sheet

Carbon Dioxide CO₂ No. 10-104-45

	Extended Range	Standard Range	Extended Range
Range	0.125 - 1.5%	0.25 - 3%	0.5 - 6%
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 2	2	1.5
Correction Factor	0.5	1	2.3

Precision (Relative Standard Deviation)*: $\leq \pm 10\%$

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

Humidity: No effect 5 - 85% RH

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

Temp (°C/°F)	0/32	10/50	23/73	40/104
Corr. Factor	0.85	0.95	1.0	1.05

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

Color Change: White → Purple

Reaction Principle: $\text{CO}_2 + \text{H}_2\text{NNH}_2 \rightarrow \text{H}_2\text{NNHCO}_2\text{H}$ (pH indicator change)

<u>Cross-sensitivity:</u> Substance	Concentration (ppmv)	Apparent Reading*
CO	1.5%	0
SO ₂	5%	2.5%
SO ₂	200	0
NO	100	0
NH ₃	5%	0
CH ₄	2.5%	0
H ₂ S	2000	0
Hexane	1500	0
Toluene	400	0

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

Other Possible Interferences: Acid gases. Ammonia interferes in mixtures.

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