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Gas Detection Tube Data Sheet

Ozone O₃

No. 10-133-03

	Extended Range	Standard Range	Extended Range
Range (ppmv)	Do not extend	0.05 – 0.6	0.15 – 1.8
No. of Pump Strokes		5	1
Sample Volume (mL)		500	100
Sample Time (min)		5 x 2	2
Correction Factor		1	3

Precision (Relative Standard Deviation)*: ≤ ±20%

Linearity with No. of Pump Strokes: r² = 0.990

Humidity: Calibration is based on approximately 50% relative humidity.

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

Temp (°C/°F)	0/32	10/50	20/68	40/104
Corr. Factor	0.74	1.0	1.0	1.1

Storage Life: 1 year in darkness at 5 - 25°C (40 - 77°F). Refrigeration preferred.

Color Change: Blue → White

Reaction Principle: 2O₃ + C₁₆H₁₀N₂O₂ → 2C₈H₅NO₂ + 2O₂

Cross-sensitivity: Substance	Concentration (ppmv)	Apparent Reading*
Cl ₂	<10	0
Cl ₂	≥10	~0.1 [#]
ClO ₂	1	entire tube [#]
CO	100	0
CO ₂	10,000	0
CH ₄	70,000	0
SO ₂	100	0
H ₂ S	120	0
NO	5	0
NO ₂	1	0
Isobutylene	100	0
n-Hexane	100	0

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

[#]Slight discoloration and unclear demarcation

Other Possible Interferences: Bromine and other oxidants.

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