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Gas Detection Tube Data Sheet Nitrogen Dioxide NO₂

10-117-10

	Extended Range	Standard Range	Extended Range
Range (ppmv)	Do Not Extend	0.5-30	Do Not Extend
No. of Pump Strokes		1	
Sample Volume (mL)		100	
Sample Time (min)		1.5	
Correction Factor		1	

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

Linearity with No. of Pump Strokes: Non-linear, do not extend

Humidity: No effect between 0-90%RH.

Temperature Range: No effect between 0 - 40°C(32 - 104°F)

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

<u>Color Change</u>: White \rightarrow Yellow

<u>Reaction Principle</u>: NO₂ + o-Tolidine \rightarrow Nitrated yellow product

<u>Cross-sensitivity</u> : Substance	Concentration (ppmv)	Apparent Reading*
со	3000	0
CO ₂	200000	0
SO ₂	200	0
CH ₄	25000	0
H₂S	100	0
Acetone	10000	0
Benzene	5	0
n-Hexane	100	0
Isobutylene	100	0
Toluene	100	0
CI2	50	Entire tube [^]
NO	500	1 [#]

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

^Cl₂ results in light yellow stain.

[#]NO results in orange stain.

Other Possible Interferences: Reducing gases.

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