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Gas Detection Tube Data Sheet

Amines RNH₂ (CH₃NH₂) No. 10-132-10

	Extended Range	Standard Range	Extended Range
Range (ppmv)	0.25 - 5	0.5 - 10	1.0 - 20
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 1.0	1.0	1.0
Correction Factor	0.5	1.0	2.0

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

Linearity with No. of Pump Strokes: $r^2 = 0.997$

Humidity: No effect 0 - 90% RH

Temperature Range:	Temp (°C/°F)	0/32	10/50	20/68	30/86	40/104
0 - 40°C (32 - 104°F)	Corr. Factor	1.16	1.10	1.0	0.96	0.96

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

Color Change: Pink → Yellow

Reaction Principle: $2RNH_2 + H_2SO_4 \rightarrow (RNH_3)_2SO_4$

Cross-sensitivity: Substance	Concentration (ppmv)	Apparent Reading*	Correction Factor
Ammonia	5	6.0	0.8
Methylamine	10	10*	1.0
Ethylamine	8	7.0	1.1
Allylamine	7.4	8.0	0.93
Diethylamine	5	6.3	0.79
Trimethylamine	4.5	9.8	0.46
Triethylamine	6	9.5	0.63
Methylaziridine (Propylene imine)	5	6.5	0.77
Ethylenediamine	7	2.0 [#]	3.5
Ethanolamine	36	4.1 [#]	8.8
Pyridine	10	Over range [†]	-
H ₂ S	100	0	
CO	500	0	
Isobutylene	100	0	
HCl	1000	0 [£]	

* Data based on RAE pumps and tubes used in standard range. This tube is calibrated using methylamine. [#] Deep purple with yellow stain at endpoint.

[†] Slight color change to light pink. [£] Interferes in mixtures.

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