NAGCO
NORTH AMERICAN GAS CO.
SAFETY & INSTRUMENTATION GAS PRODUCTS

*TUBE DATASHEET*

## Amines $RNH_2$ ($CH_3NH_2$) No. N10-132-10


| | 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 | 1 | 1 |
| Correction Factor | 0.5 | 1.0 | 2.0 |

Precision (Relative Standard Deviation)*: ≤ ±20%
Linearity with No. of Pump Strokes: r2 = 0.997 Humidity: No effect 0 - 90% RH
Temperature Range: 0 - 40°C (32 - 104°F) @ constant 50%RH.

| Temp (°C/°F) | 0/32 | 10/50 | 20/68 | 30/86 | 40/104 |
|---|---|---|---|---|---|
| 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: $2RNH_2 + H_2SO4 \rightarrow (RNH_3)_2 SO_4$

| 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 |
| Allyamine | 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† | - |
| $H_2S$ | 100 | 0 | |
| CO | 500 | 0 | |
| Isobutylene | 100 | 0 | |
| HCl | 1000 | 0£ | |

* Data based on NAGCO pump 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.

Other Possible Interferences: Other bases.
matics.