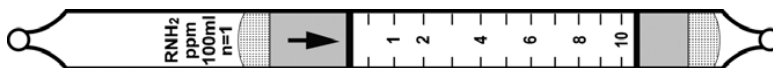


**Amines  $\text{RNH}_2$  ( $\text{CH}_3\text{NH}_2$ )**

**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)\*:  $\leq \pm 20\%$

Linearity with No. of Pump Strokes:  $r^2 = 0.997$  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:**  $2\text{RNH}_2 + \text{H}_2\text{SO}_4 \rightarrow (\text{RNH}_3)_2\text{SO}_4$

| Cross-sensitivity:<br>Substance   | Concentration<br>(ppmv) | Apparent<br>Reading*    | Correction<br>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 <sup>#</sup>        | 3.5                  |
| Ethanolamine                      | 36                      | 4.1 <sup>#</sup>        | 8.8                  |
| Pyridine                          | 10                      | Over range <sup>†</sup> | -                    |
| H <sub>2</sub> S                  | 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.

<sup>#</sup> Deep purple with yellow stain at endpoint.

<sup>†</sup> Slight color change to light pink.

£ Interferes in mixtures.

**Other Possible Interferences:** Other bases.  
matics.