



RAE Systems, Inc.
1339 Moffett Park Dr.
Sunnyvale, CA 94089 USA

Telephone 408-752-0723
Tube Orders 1-888-723-8823
Web www.raesystems.com

Gas Detection Tube Data Sheet

Ammonia NH₃

No. 10-100-12

| | Extended Range | Standard Range | Extended Range |
|---------------------|----------------|----------------|----------------|
| Range (ppmv) | 5 - 130 | 10-260 | 20 - 520 |
| No. of Pump Strokes | 2 | 1 | 0.5 |
| Sample Volume (mL) | 200 | 100 | 50 |
| Sample Time (min) | 2 x 1.5 | 1.5 | 1 |
| Correction Factor | 0.5 | 1 | 2 |

Precision (Relative Standard Deviation)*: $\leq \pm 12\%$

Linearity with No. of Pump Strokes: $r^2 = 1.000$

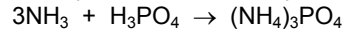
| Humidity: @ 22 °C (72 °F) | % RH | < 5% | 10% | 50% | 70% | 90% |
|------------------------------|--------------|------|-----|-----|-----|-----|
| | Corr. Factor | 0.8 | 0.9 | 1.0 | 1.0 | 1.0 |

| Temperature Range: 0 - 40°C @ 50%RH (32 - 104°F) | Temp (°C/°F) | 0/32 | 10/50 | 22/72 | 40/104 |
|---|--------------|------|-------|-------|--------|
| | Corr. Factor | 0.8 | 1.0 | 1.0 | 1.0 |

Storage Life: 2 years in darkness at 3 - 10°C (37 - 50°F). Refrigeration required.

Color Change: Purple → Beige

Reaction Principle: Prelayer reduces humidity effects



| Cross-sensitivity: Substance | Concentration (ppmv) | Apparent Reading* |
|---------------------------------|-------------------------|----------------------|
| Butylamine | 200 [#] | 200 |
| Diethylamine | 200 [#] | 260 |
| CO | 250 | 0 |
| H ₂ S | 100 [#] | 0 |
| SO ₂ | 100 [#] | 0 |
| CH ₄ | 50000 | 0 |
| CO ₂ | 50000 | 0 |
| NO ₂ | 200 | 0 |
| Hexane | 100 | 0 |
| Isobutylene | 100 | 0 |
| Toluene | 100 | 0 |

*Data based on RAE pumps and tubes used in standard range. [#] At 50% RH.

Other Possible Interferences: Amines and other bases.

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