



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

Chlorine Cl₂ No. 10-106-20

| | Extended Range | Standard Range | Extended Range |
|---------------------|----------------|----------------|----------------|
| Range (ppmv) | 2.5 - 50 | 5 - 100 | 10 - 200 |
| No. of Pump Strokes | 2 | 1 | 0.5 |
| Sample Volume (mL) | 200 | 100 | 50 |
| Sample Time (min) | 2 x 2 | 2 | 1.5 |
| Correction Factor | 0.5 | 1 | 2 |

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

Linearity with No. of Pump Strokes: $r^2 = 0.999$

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.

Color Change: White → Orange

Reaction Principle: Cl₂ + o-Tolidine → Orange colored product + HCl

| Cross-sensitivity: Substance | Concentration (ppmv) | Apparent Reading* |
|---------------------------------|-------------------------|----------------------|
| ClO ₂ | 10 | 9 |
| CO | 250 | 0 |
| CO ₂ | 50000 | 0 |
| NO | 100 | 5 |
| NH ₃ | 100 | 0 |
| CH ₄ | 25000 | 0 |
| H ₂ S | 5000 | 0 |
| SO ₂ | 10 | 0 |
| Hexane | 100 | 0 |
| Isobutylene | 100 | 0 |
| Toluene | 100 | 0 |

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

Other Possible Interferences: Other oxidizing gases.

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