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# Gas Detection Tube Data Sheet

**Benzene C<sub>6</sub>H<sub>6</sub>** 

**No. 10-101-20**

	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)\*:  $\leq \pm 12\%$

Linearity with No. of Pump Strokes:  $r^2 = 0.992$

Humidity: No effect 5 - 95% RH

Temperature Range: 0 - 40°C  
(32 - 104°F)

Temp (°C/°F)	0/32	10/50	21/70	40/104
Corr. Factor	0.8	0.9	1.0	1.1

Storage Life: 2 years in darkness at 5 - 25°C (40 - 77°F). Refrigeration preferred.

Color Change: White → Light Brown

Reaction Principle: C<sub>6</sub>H<sub>6</sub> + I<sub>2</sub>O<sub>5</sub> + H<sub>2</sub>S<sub>2</sub>O<sub>7</sub> → I<sub>2</sub> + oxidation products

<u>Cross-sensitivity:</u> Substance	Concentration (ppmv)	Apparent Reading*
CO	50	40
CO <sub>2</sub>	50000	0
H <sub>2</sub> S	50	20
NO	100	40
NH <sub>3</sub>	100	0
CH <sub>4</sub>	25000	0
SO <sub>2</sub>	10	0
Hexane	50	>100
Isobutylene	100	10
Toluene	100	20
o-Xylene	50	3

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

Other Possible Interferences: Hydrocarbons and similar reducing gases.

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