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Gas Detection Tube Data Sheet Xylenes C_8H_{10} $-\bigcirc$ No. 10-112-20

	Extended Range	Standard Range	Extended Range
Range (ppmv)	5 - 100	10 - 200	20 - 400
No. of Pump Strokes	4	2	1
Sample Volume (mL)	400	200	100
Sample Time (min)	4 x 2	2 x 2	2
Correction Factor	0.5	1	2

Precision (Relative Standard Deviation)*: ≤ ± 12%

Linearity with No. of Pump Strokes: $r^2 = 0.991$

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	2.4	1.4	1.0	1.7

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

Color Change: White → Reddish Brown

Reaction Principle: $C_8H_{10} + I_2O_5 + H_2SO_4 \rightarrow I_2 +$ oxidation products

Cross-sensitivity:	Concentration	Apparent
Substance	(ppmv)	Reading*
p-Xylene	100	100
o-Xylene	100	40 (brown)
m-Xylene	100	20 (brown)
Toluene	20	50 (brown)
Benzene	10	10 (v.faint)
Hexane	100	0
Isobutylene	100	0
CO	250	0
CO ₂	50000	0
H ₂ S	5000	0
NO	100	3 (v.faint)
NH ₃	100	0
CH ₄	25000	0
SO ₂	10	0

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

Note: The tube is calibrated to p-xylene.

Other Possible Interferences: Other aromatics.

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