

**Performance**

Measuring Range	5 to 10 ppm	10 to 250 ppm	250 to 625 ppm
Number of Pump Strokes	2	1	1/2
Correction Factor	1/2	1	2.5
Sampling Time	1.5 minute per pump stroke		
Detecting Limit	1 ppm (n=2)		
Colour Change	White → Brown		
Reaction Principle	Xylene reacts with iodine pentoxide to liberate iodine to produce brown colour. $\text{C}_6\text{H}_4(\text{CH}_3)_2 + \text{I}_2\text{O}_5 + \text{H}_2\text{SO}_4 \longrightarrow \text{I}_2$		
Coefficient of Variation	10% (for 10 to 50 ppm), 5% (for 50 to 250 ppm)		
Shelf Life	3 Years		
Corrections for temperature & humidity	Unnecessary		
Store the tubes at cool and dark place.			

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself
Carbon Monoxide	≤1000ppm	2 layers	Discolours pale brown (Whole layer)
Acetylene, Hexane	≤2000 ppm	2 layers	Discolours pale brown (Whole layer)
Toluene	≥1/5 time	Plus error	Discolours brown
Benzene	≥1/5 time	Plus error	Discolours pale yellow

Other substance measurable with this detector tube

Tube 123 Reading (n = 2)	10	20	50	100
Trimethylbenzene Conc. (ppm)	10	27	90	300

Calibration gas generation Diffusion tube method

TLV-TWA	TLV-STEL	Explosive range
100ppm	150ppm	1.0 to 7.0%