

**Performance**

Measuring Range	2.5 to 5 ppm	5 to 60 ppm	60 to 120 ppm
Number of Pump Strokes	4	2	1
Correction Factor	1/2	1	2
Sampling Time	1.5 minutes per pump stroke		
Detecting Limit	0.5 ppm (n=4)		
Colour Change	White → Dark Green		
Reaction Principle	Benzene reduces iodine pentoxide to liberate iodine, which produces a dark green in colour $\text{C}_6\text{H}_6 + \text{I}_2\text{O}_5 + \text{H}_2\text{S}_2\text{O}_7 \rightarrow \text{I}_2$		
Coefficient of Variation	10% (for 5 to 20 ppm), 5% (for 20 to 60 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
Esters	≥2000 ppm	Plus error	No discoloration
Aromatic Hydrocarbons	-	Plus error	Produces dark green stain

Other substance measurable with this detector tube

Substance	Correction Factor	No. of Pump Strokes	Measuring Range
Diisobutylene	9	1	45 to 540 ppm
α-pinene	19	3	95 to 1140 ppm

Calibration gas generation Diffusion tube method

TLV-TWA	TLV-STEL	Explosive range
0.5ppm	2.5ppm	1.3 to 7.1%