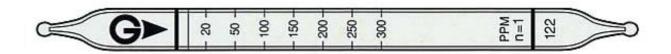
Toluene C6H5CH3 No.122



Performance

Measuring Range	5 to10 ppm	10 to 300 ppm	300 to 690 ppm	
Number of Pump Strokes	2	1	1/2	
Correction Factor	1/2	1	2.3	
Sampling Time	1.5 minutes per pump stroke			
Detecting Limit	1 ppm (n=2)			
Colour Change	White ─► Brown			
Reaction Principle	Toluene reacts with iodine pentoxide to liberate iodine to produce brown colour. $C_6H_5CH_3 + I_2O_5 + H_2SO_4 \longrightarrow I_2$			
Coefficient of Variation	10% (for 10 to 100 ppm), 5% (for 100 to 300 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	<u>≥</u> 1000ppm	2 layers	Discolours pale brown
Acetylene	<u>≥</u> 2000 ppm	2 layers	Discolours pale brown
Xylene	≥1/5 time	Plus error	Discolours brown
Hexane	<u>≥</u> 2000 ppm	2 layers	Discolours pale brown
Benzene	≥1/5 time	Plus error	Discolours pale yellow

Other substance measurable with this detector tube

Substance	Correction Factor	Pump Strokes	Measuring Range
Ethyl benzene	1.1	1	11 to 330 ppm

Calibration gas generation Diffusion tube method

TLV-TWA	TLV-STEL	Explosive range
20ppm	-	1.4 to 6.7%