

Performance

Measuring Range	20 to 800 ppm			
Number of Pump Strokes	2			
Correction Factor	1			
Sampling Time	3 minutes per pump stroke			
Detecting Limit	5 ppm (n=2)			
Colour Change	Yellow─► Blackish brown ─► Pale blue after few minutes			
Reaction Principle	$CH_3CO_2C_2H_5 + Cr^{6+} + H_2SO_4 \longrightarrow Cr^{3+}$			
Coefficient of Variation	15% (for 25 to 200 ppm), 10% (for 200 to 800 ppm)			
Shelf Life	2 Years			
Corrections for temperature & humidity	Temperature correction is necessary			
Store the tubes at cool and dark place.				

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself
Alcohols	-	Plus error	Discolours dark green
Ketones	-	Plus error	Discolours dark green
Esters	-	Plus error	Discolours dark green
Aromatic Hydrocarbons	-	Plus error	Discolours dark green

Other substances measurable with this detector tube

Substance	Correction Factor	No of Pump strokes	Measuring range
Cymene	0.28	2	5.6 to 224 ppm
Diisopropyl benzene	0.5	1/2	10 to 400 ppm
Ethyl acrylate	0.4	2	8 to 320 ppm
2-Hexyl alcohol	3.0	3	60 to 2400 ppm
Isopropyl ether	0.9	2	18 to 720 ppm
Mesityl oxide	1.35	2	27 to 1080 ppm
Methyl acrylate	0.4	2	8 to 320 ppm

Calibration gas generation Diffusion tube method

TLV-TWA	TLV-STEL	Explosive range
400ppm	-	2 to 11.5%