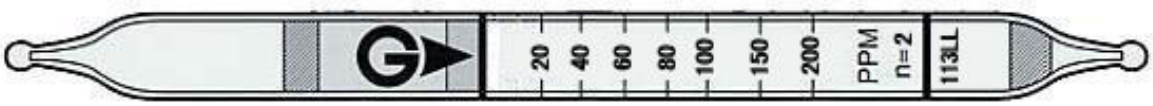
Isopropyl alcohol

$CH_3CH(OH)CH_3$
$(i\text{-}C_3H_7OH)$

NO.113LL



Performance

Measuring Range	20 to 200 ppm	200 to 440 ppm
Number of Pump Strokes	2	1
Correction Factor	1	2.2
Sampling Time	3 minutes per pump stroke	
Detecting Limit	5 ppm (n=2)	
Colour Change	Pink→ Pale blue	
Reaction Principle	Isopropyl alcohol reduces potassium dichromate to form chromic sulphate, which is blue in colour $CH_3CH(OH)CH_3 + Cr^{6+} + H_2SO_4 \longrightarrow Cr^{3+}$	
Coefficient of Variation	15% (for 20 to 60 ppm), 10% (for 60 to 200 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	Produces pale blue stain.
Esters, Ketones	-	No error	No discolouration
Aliphatic hydrocarbon	-	No error	No discolouration
Aromatic hydrocarbon	-	No error	No discolouration

Other substance measurable with this detector tube

Substance	Correction Factor	Pump Strokes	Measuring Range
Ethylene glycol MEE	0.76	2	15.2 to 152 ppm
1-Methoxy-2-propanol	0.76	2	15.2 to 152 ppm
Propyl alcohol	0.68	2	13.6 to 136 ppm
Ethylene glycol MBE	1.15	2	23 to 230 ppm
Ethylene glycol MME	1	2	20 to 200 ppm

Calibration gas generation Diffusion tube method

TLV-TWA	TLV-STEL	Explosive range
200ppm	400ppm	2 to 12.7%