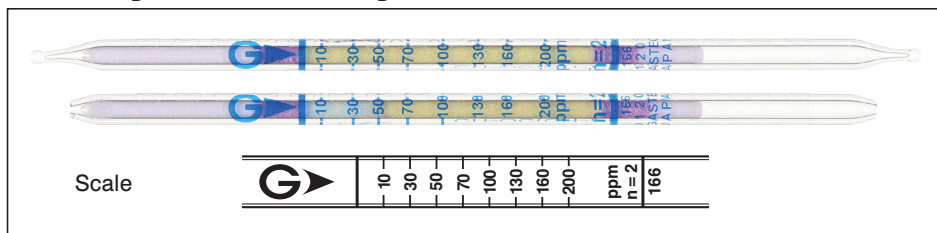


Methyl tert-Butyl Ether $\text{CH}_3\text{OC}(\text{CH}_3)_3$ No.166



Performance

Measuring range	10 to 200 ppm	200 to 660 ppm
Number of pump strokes	2 (200 mL)	1 (100 mL)
Correction factor	1	3.3
Sampling time	3 min	1.5 min
Detecting limit :	2 ppm (2 pump strokes)	
Colour change :	Yellow → Pale blue	
Operating conditions :	Temperature 0 to 35 °C (32 to 95 °F) correction used Relative humidity 0 to 90 % correction not used	
Relative standard deviation :	10 % (for 10 to 50 ppm), 5 % (for 50 to 200 ppm)	
Tube quantity and number of tests per box :	10 tubes for 10 tests	
Shelf life :	24 months	

Reaction principle



Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Methanol	≥ 3 times	+	Pale blue (≥ 5 ppm)
1-Propanol	$\geq 1/1$	+	Two layers
2-Propanol	$\geq 1/1$	+	Three layers
Aromatic hydrocarbons (Benzene)	≥ 30 ppm	No*	Pale brown (whole layer)
Aromatic hydrocarbons (Toluene)	≥ 1.0 ppm	+(Two layers, Unclear demarcation)	Blackish brown (≥ 0.5 ppm)
n-Hexane	≤ 10 ppm	No*	Pale brown (whole layer)

*When Benzene coexists in a gas concentration of 30 ppm, or if n-Hexane coexists in a gas concentration of 10 ppm the reagent stains as two layers. The tube reading is unaffected.

Other substance measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Methyl isothiocyanate	Factor : 3.98	1	39.8 to 796 ppm
	Factor : 8.83	1/2	88.3 to 1766 ppm

Calibration gas generation

Diffusion tube method