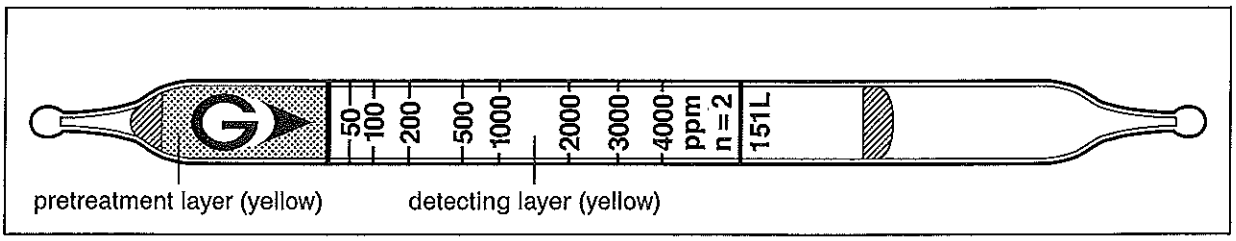
Acetone CH_3COCH_3 No.151L



Performance

Measuring range	50 to 4000 ppm	4000 to 12000 ppm
Number of pump strokes	2 (200 ml)	1 (100 ml)
Correction factor	1	3
Sampling time	4 min	2 min

Detecting limit : 5 ppm (2 pump strokes)
Colour change : Yellow → Red
Corrections for temperature & humidity : Temperature correction is necessary.
Relative standard deviation : 15 %(for 50 to 500 ppm), 10 %(for 500 to 4000 ppm)
Shelf life : 2 years (in the refrigerator)

Reaction principle

$CH_3COCH_3 + (NH_2OH)_3H_3PO_4 \rightarrow H_3PO_4$
H_3PO_4 + Base → Phosphate

Possible coexisting substances and their interferences (NOTE : Page 2-5)

Substance	Concentration	Interference	Changes colour by itself to
Acetaldehyde	≧ 1/10	+	Red
Acrolein	≧ 1/10	+	
Methyl ethyl ketone		+	
Methyl isobutyl Ketone		+	
Aromatic hydrocarbons		No	No

Other substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Methyl ethyl ketone	Factor : 0.42	5	21 to 1680 ppm
Propionaldehyde	Factor : 0.47	2	24 to 1880 ppm

Calibration gas generation

Diffusion tube method

TLV-TWA : 500 ppm TLV-STEL : 750 ppm Explosive range : 2.1 to 13 %
*TLV-TWA : 200 ppm *TLV-STEL : 500 ppm