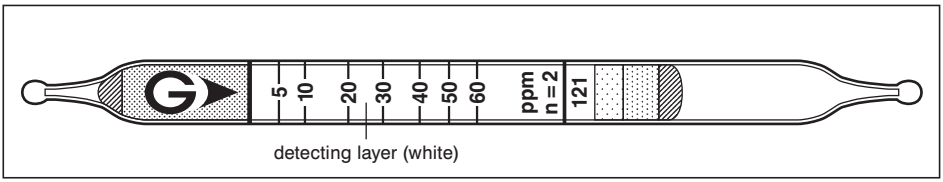
Benzene C_6H_6 No.121



Performance

Measuring range	2.5 to 5 ppm	5 to 60 ppm	60 to 120 ppm
Number of pump strokes	4 (400 ml)	2 (200 ml)	1 (100 ml)
Correction factor	1/2	1	2
Sampling time	6 min	3 min	1.5 min

Detecting limit : 0.5 ppm (4 pump strokes)
Colour change : White → Dark green
Corrections for temperature & humidity : Unnecessary
Relative standard deviation : 10 %(for 5 to 20 ppm), 5 %(for 20 to 60 ppm)
Shelf life : 3 years

Reaction principle

$C_6H_6 + I_2O_5 + H_2S_2O_7 \rightarrow I_2$

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Aromatic hydrocarbons		+	Dark green
Esters	≧ 2000 ppm	+	No
Alcohols, Ketones	≦ 1%	No	No
Aliphatic hydrocarbons		No	Pale brown

Other substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Diisobutylene	Factor : 9	1	45 to 540 ppm
α-Pinene	Factor : 19	3	95 to 1140 ppm

Calibration gas generation

Diffusion tube method