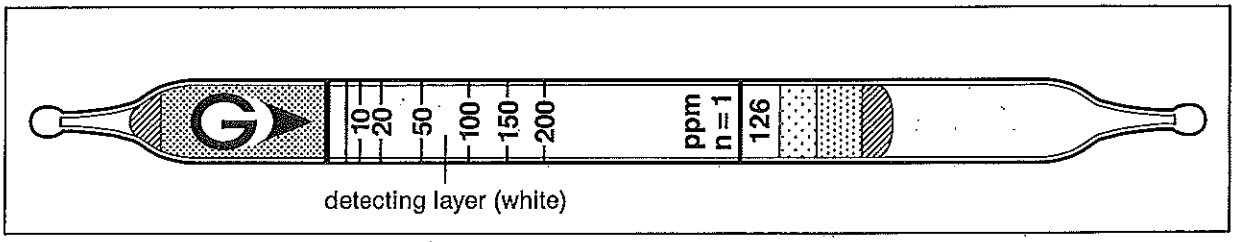
Chlorobenzene C_6H_5Cl No.126



Performance

Measuring range	2 to 5 ppm	(5) to 200 ppm	200 to 500 ppm
Number of pump strokes	2 (200 ml)	1 (100 ml)	1/2 (50 ml)
Correction factor	0.4	1	2.5
Sampling time	3 min	1.5 min	1 min

Detecting limit : 0.2 ppm (2 pump strokes)
Colour change : White → Gray
Corrections for temperature & humidity : Unnecessary
Relative standard deviation : 15 % (for 5 to 50 ppm), 10 % (50 to 200 ppm)
Shelf life : 3 years

Reaction principle

$C_6H_5Cl + I_2O_5 + H_2S_2O_7 \rightarrow I_2$

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

Substance	Concentration	Interference	Changes colour by itself to
Aromatic hydrocarbons		+	Gray
Acetylene	≧ 0.2 %	No (Two layers)	Pale brown (whole layer)
Carbon monoxide	≧ 0.1 %		
Ethylene	≧ 0.2 %		
Hexane	≧ 0.2 %		
Alcohols	≧ 1 %	+	No
Esters	≧ 0.2 %	+	
Ketones	≧ 1 %	+	

Calibration gas generation

Diffusion tube method

TLV-TWA : 10 ppm Explosive range : 1.3 to 9.6 %