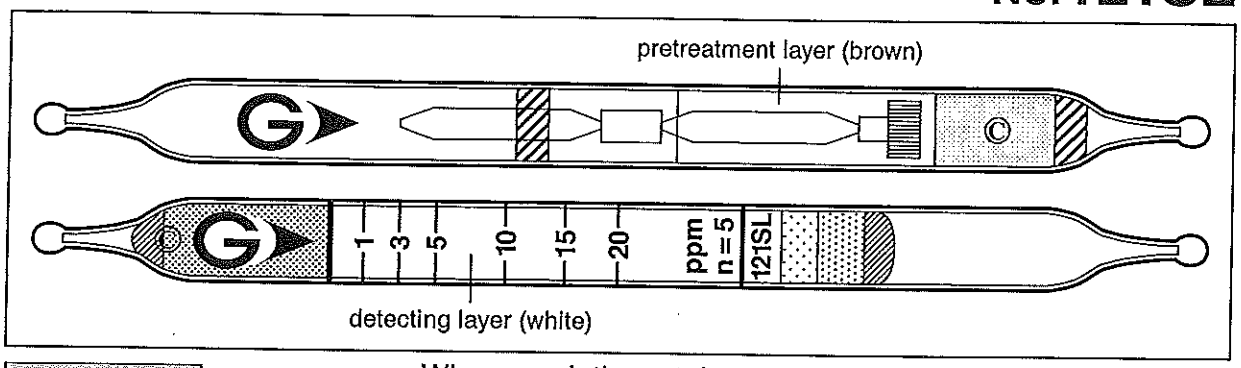
Benzene C_6H_6 No.121SL



Performance When used, these tubes are to be connected. See page 2-3.

Measuring range	1 to 20 ppm	20 to 100 ppm
Number of pump strokes	5 (500 ml)	1 (100 ml)
Correction factor	1	5
Sampling time	10 min	2 min

Detecting limit : 0.25 ppm (5 pump strokes)
Colour change : White → Dark green
Corrections for temperature & humidity : Unnecessary
Relative standard deviation : 20 % (for 1 to 5 ppm), 15 % (for 5 to 20 ppm)
Shelf life : 3 years

Reaction principle

Pretreatment tube : Interference gas removing
Detector tube : $C_6H_6 + I_2O_5 + H_2S_2O_7 \rightarrow I_2$

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

Substance	Concentration	Interference	Changes colour by itself to
Hexane	≦ 50 ppm	No	No
Toluene	≦ 100 ppm	No	
Xylene	≦ 150 ppm	No	

Aromatic hydrocarbons other than benzene are trapped in the brown layer in the pretreatment tube. If the pretreatment reagent is entirely consumed (whole brown layer turns to dark brown), a higher reading will be given.

Calibration gas generation

Diffusion tube method

TLV-TWA : 0.5 ppm TLV-STEL : 2.5 ppm Explosive range : 1.3 to 7.1 %