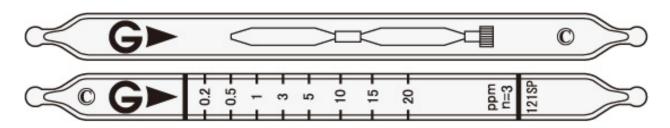
Benzene C6H6 No.121SP



## **Performance**

1 of formation			
Measuring Range	0.2 to 20 ppm	20 to 66 ppm	
Number of Pump Strokes	3	1	
Correction Factor	1	3.3	
Sampling Time	1.5 minutes per pump stroke		
Detecting Limit	0.1 ppm (n=3)		
Colour Change	White→ Brown		
Reaction Principle	$2C_6H_6 + HCHO \longrightarrow C_6H_5CH_2C_6H_5 + H_2O$ $C_6H_5CH_2C_6H_5 + H_2S_2O_7 \longrightarrow Condensation polymer$		
Coefficient of Variation	10% (for 0.2 to 5 ppm), 5% (for 5 to 20 ppm)		
Shelf Life	2 Years		
Corrections for temperature & humidity	Unnecessary		
Store the tubes at cool and dark place.			

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself
Hexane	<u>≤</u> 500 ppm	No effect	No discoloration
Toluene	<u>≤</u> 300 ppm	No effect	No discoloration
Xylene	<u>≤</u> 350 ppm	No effect	No discoloration

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

## Calibration gas generation Diffusion tube method

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