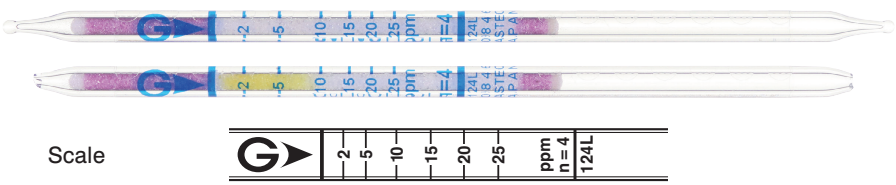
Styrene $C_6H_5CH{:}CH_2$ No.124L



Performance

Measuring range	2 to 25 ppm	25 to 123 ppm
Number of pump strokes	4 (400 mL)	1 (100 mL)
Correction factor	1	4.9
Sampling time	2 min	30 sec

Detecting limit : 0.5 ppm (4 pump strokes)
Colour change : White → Yellow
Operating conditions : Temperature 0 to 40 °C (32 to 104 °F) correction not used
Relative humidity 0 to 90 % correction not used
Relative standard deviation : 10 % (for 2 to 5 ppm), 5 % (for 5 to 25 ppm)
Tube quantity and number of tests per box : 10 tubes for 10 tests
Shelf life : 36 months

Reaction principle

$C_6H_5CH{:}CH_2 + H_2S_2O_7 \rightarrow$ Condensation polymer

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Butadiene	≧ 5 ppm	+ (Bleaching)	Blackish brown
Alcohols	≧ 10 times		No
Aldehydes	≧ 10 times		
Esters	≧ 10 times		
Ketones	≧ 10 times		

Other substance measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Divinyl benzene	Factor : 0.6	3	1 to 15 ppm
Vinyl toluene	Factor : 6.9	1	13.8 to 172.5 ppm

Calibration gas generation

Diffusion tube method

Special note

A very low level concentration (0.2 to 4 ppm) of styrene can be measured by a Gastec special detector tube (No.124S) that is available with the Gastec Odorant Analysis System.

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