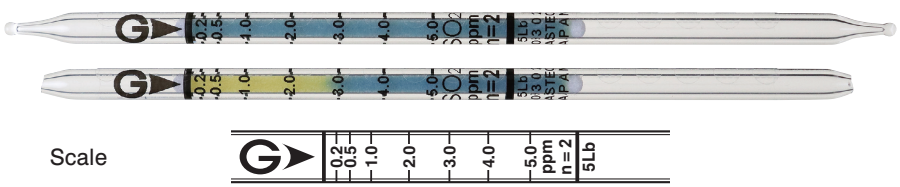
Sulphur Dioxide SO_2 No.5Lb



Performance

Measuring range	0.05 to 0.1 ppm	0.1 to 0.2 ppm	0.2 to 5.0 ppm	5.0 to 10.0 ppm
Number of pump strokes	8 (800 mL)	4 (400 mL)	2 (200 mL)	1 (100 mL)
Correction factor	1/4	1/2	1	2
Sampling time	8 min	4 min	2 min	1 min

Detecting limit : 0.01 ppm (8 pump strokes)
Colour change : Yellowish green → Yellow
Operating conditions : Temperature 0 to 40 °C (32 to 104 °F) correction not used
Relative humidity 20 to 80 % correction not used
Relative standard deviation : 10 % (for 0.2 to 1 ppm), 5 % (for 1 to 5 ppm)
Tube quantity and number of tests per box : 10 tubes for 10 tests
Shelf life : 36 months

Reaction principle

$SO_2 + BaCl_2 + H_2O \rightarrow BaSO_3 + 2HCl$
$HCl + Base \rightarrow Chloride$

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Nitrogen dioxide	≧ 1 ppm	Unclear demarcation	Yellow
Carbon monoxide		No	No
Hydrogen sulphide		No	
Nitric oxide		No	
Carbon dioxide	100 %	+	Yellow

Calibration gas generation

Permeation tube method

Special note

If sulphur dioxide coexists with carbon dioxide, an unclear demarcation will result. In this case, use No. 5LC detector tube.