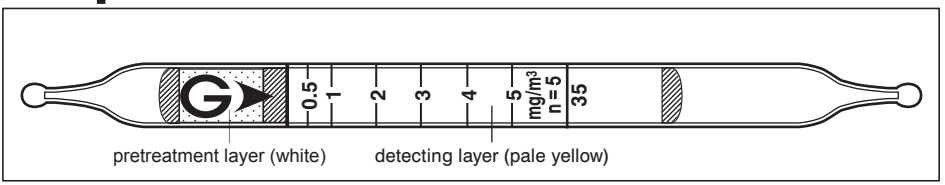
Sulphuric Acid H_2SO_4 No.35



Performance

Measuring range	0.5 to 5 mg/m³
Number of pump strokes	5 (500 ml)
Correction factor	1
Sampling time	5 min

Detecting limit : 0.2 mg/m³ (5 pump strokes)
Colour change : Pale yellow → Reddish purple
Corrections for temperature & humidity : Temperature correction is necessary.
Relative standard deviation : 10 %(for 0.5 to 2 mg/m³), 5 %(for 2 to 5 mg/m³)
Shelf life : 2 years

Reaction principle

$H_2SO_4 + BaCl_2 \rightarrow 2HCl$
$HCl + Base \rightarrow Chloride$

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Hydrogen chloride	≧ 0.05ppm	+	Reddish purple
Chlorine	≧ 1.5ppm	+	
Sulphur dioxide		No	No
Nitrogen dioxide	≧ 4 ppm	+	Reddish purple
Hydrogen fluoride	≧ 0.5 ppm	+	

Calibration gas generation

Bubbling method