

Hydrogen sulphide + Sulphur dioxide



NO.45H



Performance

Measuring Range	0.02 to 0.2%	0.2 to 4.0%	4.0 to 8.0%
Number of Pump Stroke	2 to 10	1	1/2
Correction Factor	1/2 to 1/10	1	2
Sampling Time	1 minute per pump stroke		
Detecting Limit	0.002% (n=10)		
Colour Change	Brown → Pale Yellow		
Reaction Formula	Hydrogen sulphide and sulphur dioxide react with iodine to produce hydrogen iodide which colour is pale yellow. $H_2S + I_2 \rightarrow 2HI + S$ $SO_2 + I_2 + H_2O \rightarrow 2HI + H_2SO_4$		
Coefficient of Variation	10% (for 0.2 to 1 %), 5% (for 1 to 4 %)		
Shelf Life	3 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
Other sulphur compounds	-	Plus error	Discolour pale yellow stain

Calibration gas generation High pressure gas cylinder method

TLV-TWA	TLV-STEL	Explosive range
H ₂ S – 10 ppm SO ₂ - 2 ppm	H ₂ S – 15ppm SO ₂ - 5ppm	4.0 - 44%