

Performance

Measuring range	3 to 40 LB/MMCF	40 to 100 LB/MMCF
Number of pump strokes	1(100 ml)	1/2(50 ml)
Correction factor	1	2.5
Sampling time	1.5 min	45 sec

 $\begin{array}{ll} \mbox{Detecting limit:} & \mbox{2 LB/MMCF (1 pump stroke)} \\ \mbox{Colour change:} & \mbox{Yellow} \rightarrow \mbox{Greenish purple} \\ \end{array}$

(may become purple with high humidity)
Corrections for temperature & humidity: Temperature correction is necessary.

Relative standard deviation : 10% (for 3 to 10 LB/MMCF), 5% (for 10 to 40 LB/MMCF)

Shelf life: 3 years

Reaction principle

 $H_2O + Mg(CIO_4)_2 \rightarrow Mg(CIO_4)_2 \cdot H_2O$

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Sulphur dioxide	≤ 15 ppm	No	No
Nitrogen dioxide, Hydrogen sulphide	≦ 30 ppm	No	No
Hydrogen cyanide	≤ 45 ppm	No	No
Methyl ethyl ketone	≤ 70 ppm	No	No
Ethyl acetate	≤ 100 ppm	No	No
Acrylonitrile	≤ 55 ppm	No	No
Acetaldehyde	≤ 50 ppm	No	No
Methanol	≥ 100 ppm	+	Green
Triethylene glycol		No	No

Calibration gas generation

Diffusion tube method