

Performance

Measuring range	20 to 40 ppm	40 to 1000 ppm
Number of pump strokes	2(200 ml)	1 (100 ml)
Correction factor	1/2	1
Sampling time	4 min	2 min

 $\begin{array}{lll} \mbox{Detecting limit:} & \mbox{15 ppm (2 pump strokes)} \\ \mbox{Colour change:} & \mbox{Pale vermilion} \rightarrow \mbox{Pale blue} \end{array}$

Corrections for temperature & humidity: Temperature correction is necessary.

Relative standard deviation: 10 % (for 40 to 200 ppm), 5 % (for 200 to 1000 ppm)

Shelf life: 3 years

Reaction principle

 $CH_3OH + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Alcohols		+	Pale blue
Acetone	≥ 1000 ppm	+	No (≤ 1000 ppm)
Ethyl acetate	≤ 500 ppm	No	No (≤ 500 ppm)
Toluene	≤ 300 ppm	No	No (≤ 300 ppm)
Benzene	≤ 70 ppm	No	No

Other substance measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Ethylene chlorohydrin	by scale	3	80 to 200 ppm

Calibration gas generation

Diffusion tube method