

Performance

Measuring range	8 to 12.5 ppm	12.5 to 25 ppm	25 to 500 ppm	500 to 1000 ppm
Number of pump strokes	3 (300 mL)	2(200 mL)	1 (100 mL)	1/2(50 mL)
Correction factor	1/3	1/2	1	2
Sampling time	6 min	4 min	2 min	1 min

 $\begin{array}{lll} \mbox{Detecting limit:} & 2 \mbox{ ppm } (3 \mbox{ pump strokes}) \\ \mbox{Colour change:} & \mbox{Yellow} \rightarrow \mbox{Blackish brown} \end{array}$

Operating conditions : Temperature 0 to 40 °C (32 to 104 °F) correction used Relative humidity 0 to 90 % correction not used

Relative standard deviation : 10 % (for 25 to 100 ppm), 5 % (for 100 to 500 ppm)

Tube quantity and number of tests per box: 10 tubes for 10 tests

Shelf life: 36 months

Reaction principle

 $CO + Na_2Pd(SO_3)_2 \rightarrow Pd + CO_2 + SO_2 + Na_2SO_3$

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to	
Hydrogen	≥ 5000 ppm	+	Blackish brown (whole layer) (≥ 1%)	
Acetylene	≥ 1/50	+	Blackish brown	
Carbon disulphide	≥ 1/50	+		
Halogens	≥ 1/5	+		
Hydrogen sulphide	≥ 1/5	+		
Mercaptans	≥ 1/5	+		
Sulphur dioxide	≥ 1/10	+	J	
Ethylene	≤ 2000 ppm	No	Few minutes later, whole	
		 	layer turns to brown.	
Nitrogen dioxide	≥ 40 ppm	+ (Bleaching)	Red (≥ 60 ppm)	

Calibration gas generation

High pressure gas cylinder method

Special note

The demarcation of colour change layer might not be clear. If this is the case, read the tube at the demarcation (NOT at the middle point between the dark layer end and the pale layer end).