

Performance

Measuring range	0.5 to 1 mg/l	1 to 18 mg/l	18 to 32 mg/l
Number of pump strokes	2 (200 ml)	1 (100 ml)	1/2 (50 ml)
Correction factor	1/2	1	by correction table
Sampling time	1.5 min	45 sec	30 sec

Detecting limit : 0.1 mg/l (2 pump strokes)
Colour change : Yellowish green → Purple

Corrections for temperature & humidity: Temperature correction is necessary.

Relative standard deviation: 10 % (for 1 to 6 mg/l), 5 % (for 6 to 18 mg/l)

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
Acrylonitrile	≥ 5000 ppm	+	
Alcohols	≥ 2000 ppm	+	
Ammonia	≥ 1000 ppm	+	
Esters	≥ 5000 ppm	+	
Hydrogen chloride	≥ 2000 ppm	+	No
Hydrogen cyanide	≥ 500 ppm	+	NO
Hydrogen sulphide		No	
Ketones, Aldehides	≥ 2000 ppm	+	
Nitrogen dioxide	≥ 500 ppm	+	
Sulphur dioxide	≥ 2000 ppm	+	J

Calibration gas generation

Vapour pressure method