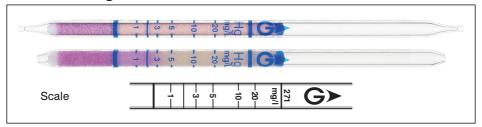
Mercury Hg²⁺



Performance

Measuring range	1 to 20 mg/L
Sampling time	5 min
Dotooting limit :	0.5 ma/l

Detecting limit: 0.5 mg/L

Colour change : Pale orange \rightarrow Bluish purple

Operating conditions : Water temperature 0 to 35 $^{\circ}$ C (32 to 95 $^{\circ}$ F) correction not used

pH value: pH 4.5 to pH 8.0

Relative standard deviation: 15 % (for 1 to 5 mg/L), 10 % (for 5 to 20 mg/L)

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

Shelf life: 36 months

Reaction principle

Hg²⁺+ PAN (indicator) → Complex compound

Possible coexisting substances and their interferences

Sub	stance	Concentration	Interference	Changes colour by itself to
Iron (II)	Fe ^{2 +}	≥ 0.5 mg/L	_	Reddish purple (≥ 0.5 mg/L)
Iron (III)	Fe ^{3 +}	≥ 1 mg/L	_	No (≤ 100 mg/L)
Copper(II)	Cu ²⁺	≥ 0.5 mg/L	+	Reddish purple (≥ 0.5 mg/L)
Zinc	Zn ²⁺	≥ 0.5 mg/L	+	Purple (≥ 0.2 mg/L)
Manganese	Mn ^{2 +}	≥ 1 mg/L	+	Bluish purple (≥ 1 mg/L)
Aluminum	Al ³⁺	≥ 0.5 mg/L	+	No (≦ 100 mg/L)
Nickel	Ni ^{2 +}	≥ 0.3 mg/L	+	Purple (≥ 0.3 mg/L)
Cobalt	Co ² +	≥ 0.2 mg/L	+	Purple (≥ 0.2 mg/L)

Calibration method

Mercury standard solution