

Performance

This detector tube is calibrated with n-Hexane.

Measuring range	0.5 to 1 mg/L	1 to 14 mg/L	14 to 28 mg/L
Number of pump strokes	2 (200 mL)	1 (100 mL)	1/2(50 mL)
Correction factor	1/2	1	2
Sampling time	1.5 min	45 sec	30 sec

Detecting limit : 0.1 mg/L (2 pump strokes)

Colour change : Yellowish brown → Greenish brown

Operating conditions : Temperature 0 to 40 $^{\circ}$ C (32 to 104 $^{\circ}$ F) correction not used

Relative humidity 0 to 90 % correction not used

Relative standard deviation : 10 % (for 1 to 4 mg/L), 5 % (for 4 to 14 mg/L)

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

Shelf life: 36 months

Reaction principle

Petroleum naphtha + Cr^{6} + H_2SO_4 \rightarrow Cr^{3} +

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to	
Acetylene	≥ 3 %	+	Blackish brown (whole layer)	
Propane	≧ 0.2 %	+		
Hydrogen sulphide	≥ 500 ppm	+	Blackish brown	
Organic solvents		+	Greenish brown	
Sulphur dioxide	≥ 500 ppm	+	Green	

Other substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Petroleum benzine	Factor: 2	1/2	14 to 28 mg/L
	Factor: 1	1	1 to 14 mg/L
	Factor: 0.5	2	0.5 to 1 mg/L
Petroleum ether	Factor: 2	1/2	14 to 28 mg/L
	Factor: 1	1	1 to 14 mg/L
	Factor: 0.5	2	0.5 to 1 mg/L

Calibration gas generation

Diffusion tube method