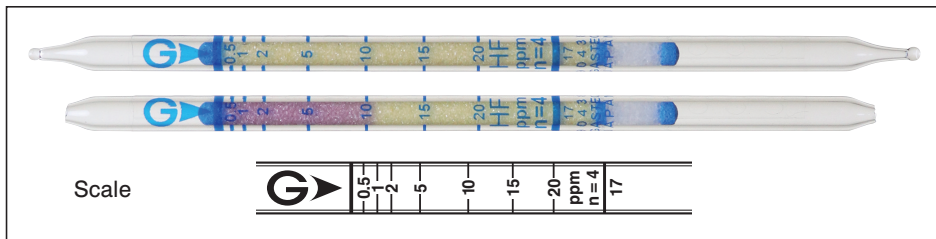


Hydrogen Fluoride HF

No.17



Performance

Measuring range	0.25 to 0.5 ppm	0.5 to 20 ppm	20 to 100 ppm
Number of pump strokes	7 (700 mL)	4 (400 mL)	1 (100 mL)
Correction factor	1/2	1	5
Sampling time	6 min	3 min	45 sec

Detecting limit : 0.1 ppm (7 pump strokes)

Colour change : Yellow → Brown

*May produce "Deep Pink" colour at higher concentration.

Operating conditions : Temperature 0 to 40 °C (32 to 104 °F) correction not used
Relative humidity 30 to 80 % correction used

Relative standard deviation : 10 % (for 0.5 to 5 ppm) , 5 % (for 5 to 20 ppm)

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

Shelf life : 36 months

Reaction principle

HF + Indicator → Reaction product

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Chlorine	≧ 1/10	+	} Brown
Hydrogen chloride	≧ 1/5	+	
Nitric acid	≧ 1/5	+	
Nitrogen dioxide	≧ 1/10	+	

Other substance measurable with this detector tube

Substance	Correction Factor	Pump strokes	Temperature	Absolute Humidity	Colour Change
Fluorine	2.5	1	20 °C (68 °F)	9mg/L	Produces brown stain
	1.0	1	20 °C (68 °F)	3mg/L	Produces a brown ring stain

Calibration gas generation

Permeation tube method