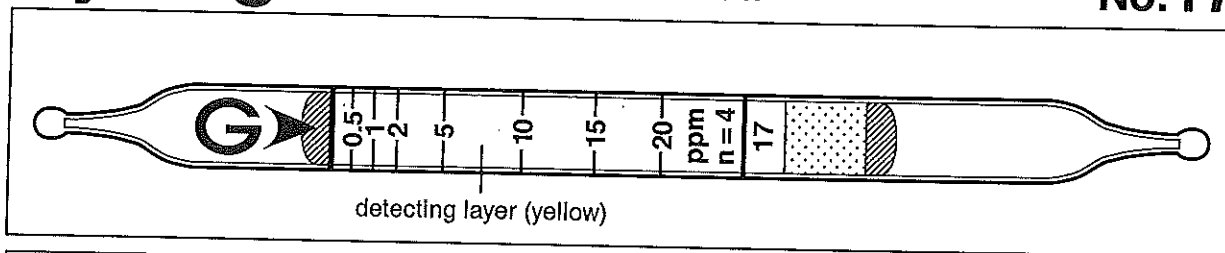


# Hydrogen Fluoride HF

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 → Brownish pink\*

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

Corrections for temperature & humidity : Humidity correction is necessary.

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

Shelf life : 3 years

## Reaction principle

HF+ Indicator → Reaction Products

## Possible coexisting substances and their interferences (NOTE : Page 2-5)

Substance	Concentration	Interference	Changes colour by itself to
Chlorine	≥ 1/10	+	} Brownish pink
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 brown stain

## Calibration gas generation

Permeation tube method

TLV-TWA : 0.5 ppm TLV-STEL : C 2 ppm