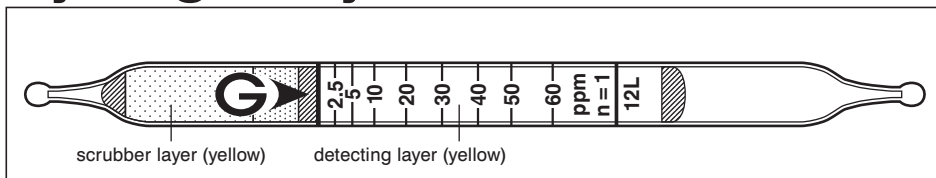


# Hydrogen Cyanide HCN

No.12L



## Performance

Measuring range	0.5 to 1.25 ppm	1.25 to 2.5 ppm	2.5 to 60 ppm	60 to 150 ppm
Number of pump strokes	5 (500 ml)	2 (200 ml)	1 (100 ml)	1/2 (50 ml)
Correction factor	0.2	0.5	1	2.5
Sampling time	3.75 min	1.5 min	45 sec	30 sec

Detecting limit : 0.1 ppm (5 pump strokes)

Colour change : Yellow → Pink

Corrections for temperature & humidity : Temperature correction is necessary.

Relative standard deviation : 10 % (for 2.5 to 20 ppm), 5 % (for 20 to 60 ppm)

Shelf life : 2 years

## Reaction principle

Hydrogen cyanide reacts with the reagent to form intermediate material which stains indicator pink.

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Interference gas only
Ammonia	≧ 2.5 ppm	–	No
Hydrogen chloride	≧ 5.0 ppm	+	Pink (≧5.0 ppm)
Nitric acid	≧ 10.0 ppm	+	Pink (≧10.0 ppm)
Sulphur dioxide	≧ 1.0 ppm	+	Pink (≧0.8 ppm)
Nitrogen dioxide	≧ 10.0 ppm	+	Pink (≧8.0 ppm)
Hydrogen fluoride	≧ 25.0 ppm	+	Pink (≧21.0 ppm)
Hydrogen sulphide	0.5 ppm	+	Pink (≧0.5 ppm)

Hydrogen chloride, Hydrogen fluoride and Nitric acid are removed by the scrubber agent. If the scrubber agent is wholly discoloured to brown, they will give plus error of the tube reading.

## Other substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Acetone cyanohydrin	Factor : 1.0	1	2.5 to 60 ppm
Boron trichloride	Factor : 0.9	1	2.25 to 54 ppm

## Calibration gas generation

Permeation tube method