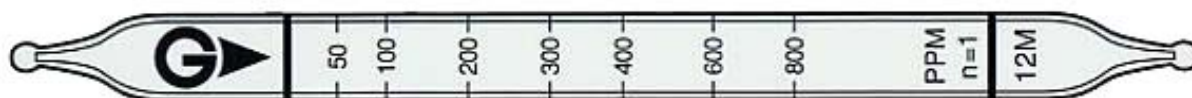


# Hydrogen cyanide

HCN

No.12M



## Performance

<b>Measuring Range</b>	17 to 50 ppm	50 to 800 ppm	800 to 2400 ppm
<b>Number of Pump Strokes</b>	2	1	1/2
<b>Correction Factor</b>	1/3	1	3
<b>Sampling Time</b>	1 minute per pump stroke		
<b>Detecting Limit</b>	1 ppm (n=2)		
<b>Colour Change</b>	Yellow → Red		
<b>Reaction Principle</b>	Hydrogen cyanide reacts with mercuric Chloride to form the hydrogen chloride then discolours the indicator to red. $2\text{HCN} + \text{HgCl}_2 \rightarrow \text{Hg}(\text{CN})_2 + 2\text{HCl}$ HCl + Base → Chloride product		
<b>Coefficient of Variation</b>	10% (for 50 to 200 ppm), 5% (for 200 to 800 ppm)		
<b>Shelf Life</b>	3 Years		
<b>Corrections for temperature &amp; humidity</b>	Unnecessary		
<b>Store the tubes at cool and dark place.</b>			

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself
Hydrogen sulphide	≥500 ppm	Plus error	Red discoloration
Sulphur dioxide	≥500 ppm	Plus error	Red discoloration

## Calibration gas generation Permeation tube method

TLV-TWA	TLV-STEL	Explosive range
-	C 4.7 ppm	5.6 to 40%