

Performance

When used, these tubes are to be connected.

| Measuring range | 2 to 5 ppm | 5 to 120 ppm | 120 to 360 ppm |
|------------------------|------------|--------------|----------------|
| Number of pump strokes | 4 (400 mL) | 2 (200 mL) | 1 (100 mL) |
| Correction factor | 0.4 | 1 | 3 |
| Sampling time | 3 min | 1.5 min | 45 sec |

Detecting limit: 1 ppm (4 pump strokes)

Colour change : Yellow → Red

Operating conditions : Temperature 0 to 40 $^{\circ}$ C (32 to 104 $^{\circ}$ F) correction used

Relative humidity 0 to 90 % correction not used

Relative standard deviation : 10 % (for 5 to 40 ppm), 5 % (for 40 to 120 ppm)

Tube quantity and number of tests per box : 10 tubes for 5 tests

Shelf life: 36 months

Reaction principle

CH2:CHCN + Cr⁶ + H2SO₄ → HCN

2HCN + HgCl₂ → 2HCl HCl + Base → Chloride

Possible coexisting substances and their interferences

| Substance | Concentration | Interference | Changes colour by itself to | |
|------------------------------|---------------|--------------|-----------------------------|--|
| Acetone cyanohydrin | ≧ 10 ppm | + |) pod | |
| Nitriles (≥ C ₃) | ≥ 10 ppm | + | Red | |
| Alcohols, Esters, Ketones | | No | | |
| Aromatic hydrocarbons | | No | No | |
| Hydrogen chloride | | No | NO | |
| Hydrogen cyanide | | No | J | |

Chlorine, hydrogen chloride, hydrogen cyanide, nitric acid and water vapour are trapped in the white layer in the pretreatment tube.

Other substance measurable with this detector tube

| Substance | Correction | No. of pump strokes | Measuring range |
|---------------|------------|---------------------|-----------------|
| Propionitrile | Factor: 10 | 4 | 50 to 1200 ppm |

Calibration gas generation

Diffusion tube method