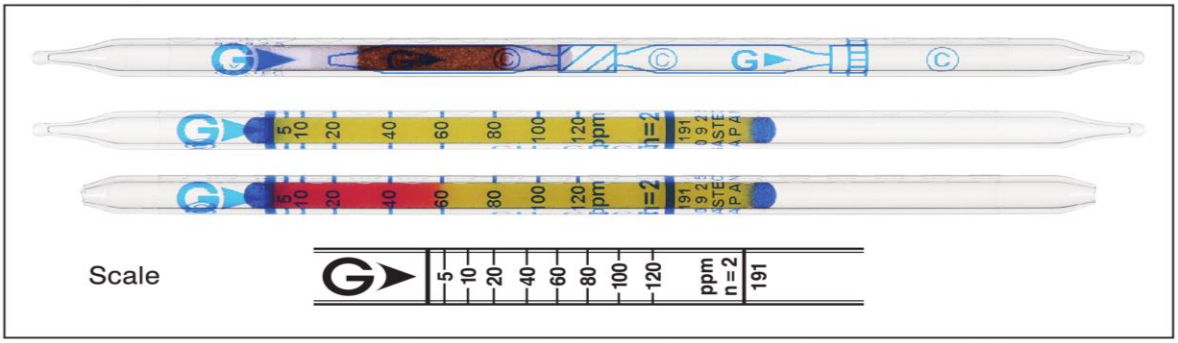
Acrylonitrile CH2:CHCN

Part No.:191

Acrylonitrile CH_2:CHCN No.191



Performance

When used, these tubes are to be connected. See page 2-3.

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 °C (32 to 104 °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

CH_2:CHCN + Cr^{6+} + H_2SO_4 → HCN
2HCN + $HgCl_2$ → 2HCl
HCl + Base → Chloride

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Acetone cyanohydrin	≧ 10 ppm	+	Red
Nitriles (≧ C_3)	≧ 10 ppm	+	Red
Alcohols, Esters, Ketones		No	No
Aromatic hydrocarbons		No	No
Hydrogen chloride		No	No
Hydrogen cyanide		No	No

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