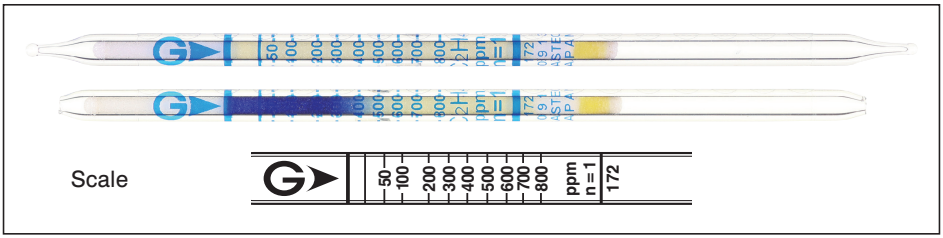
Ethylene $CH_2{:}CH_2$ No.172



Performance The minimum scale value (25ppm) is not printed on the tube, but only the scale line is printed.

Measuring range	(25) to 800 ppm	800 to 1680 ppm
Number of pump strokes	1 (100 mL)	1/2 (50 mL)
Correction factor	1	2.1
Sampling time	3 min	1.5 min

Detecting limit : 5 ppm (1 pump stroke)
Colour change : Pale yellow → Blue
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 25 to 200 ppm), 5 % (for 200 to 800 ppm)
Tube quantity and number of tests per box : 10 tubes for 10 tests
Shelf life : 36 months

Reaction principle

$CH_2{:}CH_2 + (NH_4)_2MoO_4 + PdSO_4$ → Molybdenum blue

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Butane, Carbon monoxide	≧ 1/4	+	Blue (whole layer)
Hydrogen, Pentane		+	
Butylene, Propylene		+	Blue
Ammonia, Butadiene		+	White
Hydrogen cyanide		+	
Hydrogen chloride		+	Pink
Hydrogen sulphide		+	Black

Water vapour is trapped in the pretreatment (white) layer.

Other substance measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Acetylene	Factor : 1.3	1	32.5 to 1040 ppm

Calibration gas generation

High pressure gas cylinder method