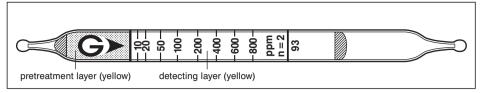
# Acrolein CH2:CHCHO



#### Performance

Measuring range	3.3 to 10 ppm	10 to 800 ppm
Number of pump strokes	4(400 ml)	2 (200 ml)
Correction factor	1/3	1
Sampling time	8 min	4 min

Detecting limit : 2ppm (4 pump strokes)

Colour change: Yellow → Red

Corrections for temperature & humidity: Temperature correction is necessary.

Relative standard deviation: 10 % (for 10 to 200 ppm), 5 % (for 200 to 800 ppm)

Shelf life: 2 years (in the refrigerator)

## Reaction principle

 $3CH_2:CHCHO + (NH_2OH)_3 \cdot H_3PO_4 \rightarrow H_3PO_4$ 

H<sub>3</sub>PO<sub>4</sub> + Base → Phosphate

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Acetaldehyde	≥ 1/5	+	)
Acetone	≥ 1/1	+	Red
Methyl ethyl ketone	≥ 3 times	+	J
Ammonia		_	) No
Sulphur dioxide	≥ 1/5	+	

Chlorine, hydrogen chloride and nitric acid are trapped in the pretreatment (yellow) layer.

#### Calibration gas generation

Diffusion tube method