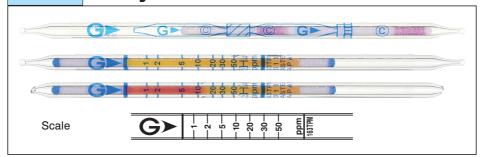
Detector tube

Ethylene Oxide C2H4O No.163TPM



Performance

When used, these tubes are to be connected.

Measuring range	1 to 50 ppm		
Sampling rate	50 mL/min(500 mL)		
Correction factor	1		
Sampling time	10 min		

 $\begin{array}{lll} \mbox{Detecting limit:} & \mbox{0.1 ppm } (500 \mbox{ mL}) \\ \mbox{Colour change:} & \mbox{Yellow} \rightarrow \mbox{Reddish brown} \\ \end{array}$

Operating conditions : Temperature 0 to 40 °C (32 to 104 °F) correction used Relative humidity 10 to 90 % correction not used

Relative standard deviation : 10 % (for 1 to 10 ppm), 5 % (for 10 to 50 ppm)

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

Shelf life: 12 months (in the refrigerator)

Reaction principle

C₂H₄O → 2HCHO

3HCHO + (NH₂OH)₃H₃PO₄ → H₃PO₄

H₃PO₄ + Base → Phosphate

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Acetaldehyde	3.5 ppm	+	Reddish brown
Alcohols	300 ppm	_	No
Ketones	8.5 ppm	+	Reddish brown
Formaldehyde	5.0 ppm	+	Reddish brown

Calibration gas generation

Permeation tube method