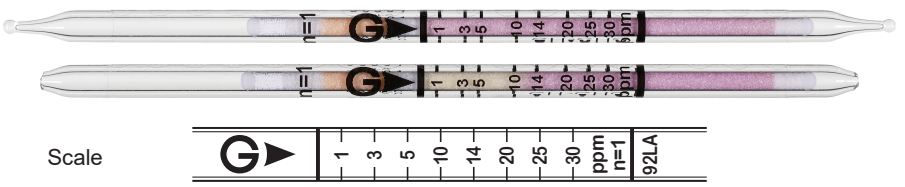
Acetaldehyde CH_3CHO No. 92LA



Performance

Measuring range	0.3 to 1 ppm	1 to 30 ppm
Number of pump strokes	2 (200 mL)	1 (100 mL)
Correction factor	0.3	1
Sampling time	5 min	2.5 min

Detecting limit : 0.13 ppm (2 pump strokes)
Colour change : Pink → Yellow
Operating conditions : Temperature 5 to 40 ℃ (41 to 104 ˚F) correction used
Relative humidity 10 to 90 % correction not used
Relative standard deviation : 15 % (for 1 to 10 ppm) , 10 % (for 10 to 30 ppm)
Tube quantity and number of tests per box : 10 tubes for 10 tests
Shelf life : 24 months

Reaction principle

$CH_3CHO + Cr^{6+} \rightarrow CH_3CO_2H$
$CH_3CO_2H + NaOH \rightarrow CH_3CO_2Na$

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Ammonia	4 times	No	No (125 ppm)
Ethanol	≧ 7 ppm	+	Yellow (≧ 0.5 ppm)
Acetic acid	7 times	No	No (200 ppm)
Methyl mercaptan	8 ppm	No	No (23 ppm)
Hydrogen sulphide	≧ 1 ppm	+	Yellow (≧ 1 ppm)
Trimethylamine	≦ 450 ppm	No	No (4700 ppm)
Formaldehyde	≧ 19 ppm	+	Yellow (≧ 3.5 ppm)
Acetone	≦ 70 ppm	No	No (≦ 400 ppm)
Diacetyl	≧ 11 ppm	+	Yellow (≧ 5 ppm)
Ozone	≧ 0.1 ppm	−	Bleaching (≧ 1 ppm)

Calibration gas generation

Diffusion tube method