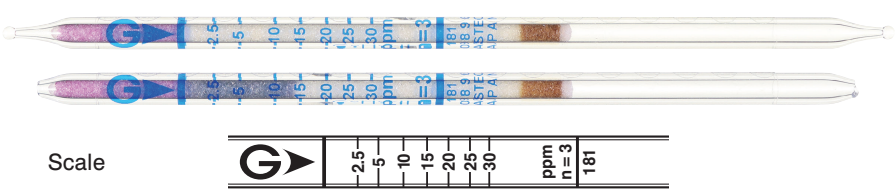
Aniline $C_6H_5NH_2$ No.181



Scale

Performance

Measuring range	1.25 to 2.5 ppm	2.5 to 30 ppm	30 to 60 ppm
Number of pump strokes	5 (500 mL)	3 (300 mL)	2 (200 mL)
Correction factor	1/2	1	2
Sampling time	5 min	3 min	2 min

Detecting limit : 0.25 ppm (5 pump strokes)
Colour change : Pale yellow → Pale green
Operating conditions : Temperature 0 to 40 °C (32 to 104 °F) correction not used
Relative humidity 0 to 90 % correction not used
Relative standard deviation : 10 %(for 2.5 to 10 ppm), 5 %(for 10 to 30 ppm)
Tube quantity and number of tests per box : 10 tubes for 10 tests
Shelf life : 36 months

Reaction principle

$C_6H_5NH_2 + Cr^{6+} + H_3PO_4 \rightarrow Cr^{3+}$

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Aromatic amines		+	Pale green
Ammonia	≧ 1/10	+	No
Other amines	≧ 1/10	+	No

Other substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
N,N-Dimethylaniline	Factor : 1.0	3	2.5 to 30 ppm
N-Methylaniline	Factor : 1.4	2	3.5 to 42 ppm
o-Toluidine	Factor : 2.0	2	5 to 60 ppm

Calibration gas generation

Diffusion tube method