

**Performance**

Measuring Range	5 to 100ppm
Number of Pump Strokes	1
Correction Factor	1
Sampling Time	1 minute per pump stroke
Detecting Limit	0.5 ppm (n=1)
Colour Change	Pink → Yellow to Brown
Reaction Principle	Amines neutralize sulphuric acid to discolour the reagent to yellow to brown $2R\cdot NH_2 + H_2SO_4 \longrightarrow (R\cdot NH_3)_2SO_4$
Coefficient of Variation	10% (for 5 to 20 %), 5% (for 20 to 100 %)
Shelf Life	3 Years
Corrections for temperature & humidity	Temperature correction is necessary
Store the tubes at cool and dark place.	

Other substance measurable with this detector tube

The Tube 180 can also be used to detect the following substances with correction factors

Substance	Pump Stroke	Correction	Detecting Range(ppm)	Colour Change
Allylamine	1	1.7	8.5 to 170	Yellow
Ammonia	1	0.3	1.5 to 30	Yellow
n-Butylamine	1	1.6	8 to 160	Greyish red to Brown
tert-Butylamine	1	1.1	5.5 to 110	Pale brown
Di-n-Butylamine	1	1.0	5 to 100	Pale orange
Cyclohexylamine	1	1.4	7 to 140	Salmon pink
Diethylamine	1	1.1	5.5 to 110	Pale brown
Diethylethanolamine	1	1.2	6 to 120	Pale brown
Diisopropylamine	1	1.0	5 to 100	Pale orange
Dimethylethanolamine	1	1.3	6.5 to 130	Pale orange to Yellow
Dimethylamine	1	1.1	5.5 to 110	Salmon pink
Dimethylaminopropylamine	1	1.6	8 to 160	Greyish red
N,N-Dimethylethylamine	1	0.8	4 to 80	Yellow
Dipropylamine	1	0.8	4 to 80	Yellow
N-Ethylmorpholine	1	1.0	5 to 100	Yellow

Ethylamine	1	1.0	5 to 100	Yellow
Ethylenediamine	1	2.8	14 to 280	Yellow
n-Hexylamine	1	1.8	9 to 180	Pale orange
Isopropylamine	1	1.1	5.5 to 110	Salmon pink
Methylamine	1	1.0	5 to 100	Pale brown to Yellow
N-Methylmorpholine	1	1.0	5 to 100	Yellow
N-Methyl pyrrolidone	1	2.7	50 to 270	Yellow
Monoethanolamine	3	1.4	7 to 140	Yellow
Morpholine	1	1.8	9 to 180	Yellow
Propylamine	1	1.2	6 to 120	Salmon pink
Propyleneimine	1	1.1	5.5 to 110	Yellow
Tetramethylenediamine	1	1.7	8.5 to 170	Purple to Yellow
Triethylamine	1	0.9	4.5 to 90	Yellow
Trimethylamine	1	0.7	3.5 to 70	Yellow

Calibration gas generation Permeation tube method or diffusion tube method

TLV-TWA	TLV-STEL	Explosive range
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