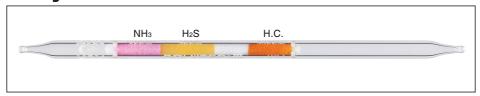
## Polytec **I**



## Performance

Number of pump strokes	n = 1
Sampling time	30 seconds per 1 pump stroke (100 mL)

Operating conditions : Temperature 0 to 40  $^{\circ}$ C (32 to 104  $^{\circ}$ F) correction not used

Relative humidity 0 to 90 % correction not used

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

Shelf life: 24 months

## Reaction principle

See the table below

Detecting layer { Name (Original colour)			NH3 (Pink)	H <sub>2</sub> S (Yellow)	HC (Yellowish brown)
Reaction principle			2NH <sub>3</sub> + H <sub>2</sub> SO <sub>4</sub> → (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> or 2R·NH <sub>2</sub> + H <sub>2</sub> SO <sub>4</sub> → (R·NH <sub>3</sub> ) <sub>2</sub> SO <sub>4</sub>	H <sub>2</sub> S + H <sub>3</sub> Cl <sub>2</sub> → HSH <sub>3</sub> Cl + HCl HCl + Base → Chloride	CnHm + Cr <sup>6</sup> ++ H <sub>2</sub> SO <sub>4</sub> → Cr <sup>3</sup> +
Substances & expected concentration	Ammonia	(≥ 0.5 ppm) (≥ 5 ppm)	Yellow (Inlet) Yellow (9 mm)		
	Hydrogen sulphide	(≥ 0.5 ppm) (≥ 2 ppm)		Red (Inlet) Red (4 mm)	
	Sulphur dioxide	(≧ 2 ppm)		Red(4 mm)	
	Hydrogen chloride	(≥ 5 ppm)		Red(8 mm)	
	Chlorine	(≧ 1 ppm)		Red (10 mm)	
	Nitrogen dioxide	e(≧ 3 ppm)		Red(4 mm)	
	Butane	(≥ 500 ppm)			Blackish brown (Whole layer)
	Gasoline	(≥ 2 ppm) (≥ 20 ppm)			Greenish brown (Inlet) Greenish brown (Whole layer)
	LPG	(≥ 5000 ppm)			Blackish brown (Whole layer)

Parenthesized values after substances show their concentrations, and those after the reaction colours show the lengths of their reaction colour layers.