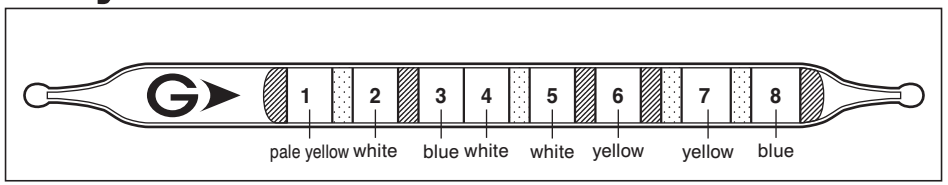
Polytec V

No.28



Performance

Number of pump strokes	n=1
Sampling time	30 seconds per 1pump stroke (100mL)
Shelf life	1.5 years

Reaction principle

See the table below

Detecting layer No. (Original colour)			1 (Pale yellow)	2 (White)	3 (Blue)	4 (White)	5 (White)	6 (Yellow)	7 (Yellow)	8 (Blue)
Reaction principle			Reaction with indicator	Reaction with p-Dimethylaminobenzaldehyde	Reaction with Barium Chloride and indicator	Reaction with o-Tolidine	Reaction with Lead Acetate	Reaction with Silver (I) Nitrate and indicator	Reaction with Sodium Hydrogen Sulphite	Neutralising reaction
Substances & expected concentration	Hydrogen chloride	(≧ 5 ppm) (≧150 ppm)	Red (Inlet) Red (Whole layer)							
	Phosgene	(≧0.5 ppm) (≧ 20 ppm)		Yellow (Inlet) Yellow (Whole layer)						
	Chlorine	(≧ 7 ppm) (≧50 ppm)		Yellow (Inlet) Yellow (Whole layer)						
	Sulphur dioxide	(≧10 ppm) (≧50 ppm)			Yellow (Inlet) Yellow (Whole layer)					
	Nitrogen dioxide	(≧ 5 ppm) (≧30 ppm)		Yellow (Inlet)		Yellow (Inlet) Yellow (Whole layer)				
	Hydrogen sulphide	(≧ 10 ppm) (≧200 ppm) (≧800 ppm)					Brown (Inlet) Brown (Whole layer) Brown (Whole layer)	Pink (Inlet) Pink (Whole layer)		
	Hydrogen cyanide	(≧ 5 ppm) (≧30 ppm)						Pink (Inlet) Pink (Whole layer)		
	Carbon monoxide	(≧ 25 ppm) (≧100 ppm)							Blackish brown (Inlet) Blackish brown (Whole layer)	
	Hydrogen	(≧ 50000 ppm) (≧100000 ppm)							Gray (Whole layer) Blackish brown (Whole layer)	
	Hydrogen phosphide	(≧ 0.5 ppm) (≧ 5 ppm) (≧ 50 ppm) (≧700 ppm)						Pink (Inlet) Pink (Whole layer) Pink (Whole layer) Pink (Whole layer)	Blackish brown (Inlet) Blackish brown (Whole layer)	
	Acetylene	(≧ 200 ppm) (≧2000 ppm)							Blackish brown (Inlet) Blackish brown (Whole layer)	
	Ethylene	(≧10000 ppm)							Blackish brown (Inlet)	
	Propylene	(≧10000 ppm) (≧50000 ppm)							Gray (Inlet) Gray (Whole layer)	
	Methyl mercaptan	(≧ 200 ppm) (≧1000 ppm)							Yellowish orange (Inlet) Yellowish orange (Whole layer)	
	Carbon dioxide	(≧ 5000 ppm) (≧20000 ppm)								Brown (Inlet) Brown (Whole layer)

Parenthesized values after substances show their concentrations.

(1) Layer 1 may indicate shorter colour stain due to interference by Ammonia coexisting at similar concentration level.
(2) Olefins stain layer 7 similarly to Carbon monoxide.
(3) (Inlet) means the approximate gas concentration discolour the inlet of the layer.
(4) (Whole layer) means the approximate gas concentration discolour the reagent of the layer.