# **SULPHURIC ACID**



#### 1. PERFORMANCE

1) Measuring range  $0.5-5 \text{ mg/m}^3$ Number of pump strokes  $5(500\text{m}\ell)$ 

2) Sampling time : 100 seconds/5 pump strokes

3) Detectable limit  $0.2 \text{ mg/m}^3$ 4) Shelf life 0.2 years5) Operating temperature  $0.2 \text{ mg/m}^3$ 

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE") 7) Reading : Direct reading from the scale calibrated by 5 pump strokes

8) Colour change : Yellow→Pink

## 2. RELATIVE STANDARD DEVIATION

RSD-low : 10 % RSD-mid. : 10 % RSD-high : 10 %

#### 3. CHEMICAL REACTION

The pH indicator is discoloured.

#### 4. CALIBRATION OF THE TUBE

ION CHROMATOGRAPHY.

### 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence	
Hydrogen chloride	Similar stain is produced.	Higher readings are given.	
Hydrogen flouride	"	"	
Nitrogen dioxide	"	"	
Chlorine	"		
Nitric acid	"	"	
Hydrogen sulphide	The accuracy of readings is not affected.	The accuracy of readings is not affected.	
Sulphur dioxide	"	"	

#### TEMPERATURE CORRECTION TABLE

Temperature	5℃ (41°F)	10 °C (50 °F)	20°C (68°F)	30 °C (86 °F)	40°C (104°F)
Correction Factor	2.0	1.5	1.0	0.8	0.6