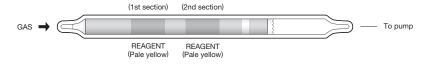
# **ETHYLENE**



#### 1. PERFORMANCE

1) Measuring range  $\begin{array}{c} \text{Number of pump strokes} \\ \text{Number of pump strokes} \\ \text{2) Sampling time} \\ \text{3) Detectable limit} \\ \end{array} \begin{array}{c} \text{: } 0.5\text{--}100 \text{ ppm} \\ 1\,(100\text{m}\,\ell) \\ \text{: } 2\,\text{minutes/1 pump stroke} \\ \text{: } 0.01 \text{ ppm}\,(500\text{m}\,\ell) \\ \end{array}$ 

4) Shelf life : 3 years 5) Operating temperature :  $0 \sim 40 \,^{\circ}\text{C}$ 

6) Reading : Colour intensity method 7) Colour change : Pale yellow → Blue

### 2. RELATIVE STANDARD DEVIATION

RSD-low: RSD-mid.: RSD-high:

#### 3. CHEMICAL REACTION

Molybdate is reduced and molybdeum blue is produced.  $H_2C = CH_2 + PdSO_4 + (NH_4) \ _2MoO_4 \rightarrow Mo_3O_8$ 

#### 4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Hydrogen (over 40 ℃)	Similar stain is produced.	10%	Whole reagent is discoloured to Blue and higher readings are given.
Saturated hydrocarbons	"		Higher readings are given.
Acetylene	Dark blue stain is produced.		"
Carbon monoxide	Green or Blue stain is produced.		Lower readings are given.
Hydrogen sulphide	Black stain is produced.	1,000	"
Hydrogen cyanide	Original colour is faded to White.		"
Benzene	Yellowish orange or Yellowish brown stain is produced.		
Carbon disulphide	"		
Chlorine	"		
Nitrogen dioxide	"	1	
Ammonia	Original colour fades to White.		Lower readings are given.