# **METHYL ACRYLATE**



# 1. PERFORMANCE

1) Measuring range 2-60 ppmNumber of pump strokes  $2(200 \text{m} \ell)$ 

2) Sampling time : 3 minutes/2 pump strokes

3) Detectable limit : 0.5 ppm4) Shelf life : 2 years5) Operating temperature  $: 0 \sim 40 \,^{\circ}\text{C}$ 

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE") 7) Reading : Direct reading from the scale calibrated by 2 pump strokes

8) Colour change : Yellow→Pale blue

# 2. RELATIVE STANDARD DEVIATION

RSD-low: 15% RSD-mid.: 10% RSD-high: 10%

## 3. CHEMICAL REACTION

Chromium oxide is reduced.

 $CH_2 = CHCO_2CH_3 + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$ 

# 4. CALIBRATION OF THE TUBE

DIFFUSION TUBE METHOD

### 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence	
Alcohols	Similar stain is produced.	Higher readings are given.	
Aliphatic hydrocarbons (more than C <sub>3</sub> )	Whole reagent is changed to dark Brown.	"	
Halogenated hydrocarbons	"	"	
Esters	"	"	
Aromatic hydrocarbons	"	"	

#### TEMPERATURE CORRECTION TABLE

Tube	С	ation (ppr	n)		
Readings (ppm)	0 °C (32 °F)	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)	40 °C (104 °F)
60	88	70	60	54	48
40	54	46	40	36	32
20	28	24	20	18	16
10	14	12	10	9	8
5	7	6	5	4	3
2	2	2	2	2	2