# **ALLYL ALCOHOL**



### 1. PERFORMANCE

: 20-500 ppm 1) Measuring range 1(100ml) Number of pump strokes

: 1.5 minutes/1 pump stroke 2) Sampling time

3) Detectable limit 5 ppm 4) Shelf life 2 years 5) Operating temperature 0~40℃

6) Temperature compensation Necessary (10  $\sim$  40 °C) (See "TEMPERATURE CORRECTION TABLE")

7) Reading Graduations printed on the tube are calibrated by Methyl methacrylate at 1 pump stroke and Allyl alcohol concentration is determined by using a converstion chart.

: Pale yellow → Pale blue 8) Colour change

#### 2. RELATIVE STANDARD DEVIATION

RSD-low: 15% RSD-mid.: 10% RSD-high: 5%

#### 3. CHEMICAL REACTION

Chromium oxide is reduced.

 $H_2C = CHCH_2OH + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$ 

#### 4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

#### 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence	
Alcohols	Similar stain is produced.	Higher readings are given.	
Ethers	"	"	
Paraffin hydrocarbons (more than C <sub>3</sub> )	Whole reagent is changed to Brown.	"	
Aromatic hydrocarbons	"	"	
Esters	"	"	
Ketones	"	"	
Halogenated hydrocarbons FIG.1	"	"	

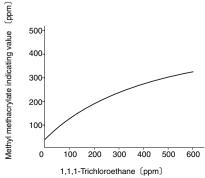


FIG.1 Influence of 1,1,1-Trichloroentane

## TEMPERATURE CORRECTION TABLE

Scale	True Concentration (ppm)					
Readings (ppm)	0°C (32°F)	10℃ (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)	
500		600	500	430	380	
400		480	400	350	300	
300	480	360	300	260	230	
200	320	240	200	170	150	
100	240	120	100	90	80	
50	80	60	50	43	38	
20	32	24	20	17	15	

