ALLYL ALCOHOL



1. PERFORMANCE

8) Colour change

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

2) Sampling time : 1.5 minutes/1 pump stroke

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

6) Temperature compensation : Necessary (10 ~ 40 °C) (See "TEMPERATURE CORRECTION TABLE")

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

: Yellow → Pale blue

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromium oxide is reduced.

 $CH_2 = CHCH_2OH + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

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	"	"	
Aliphatic hydrocarbons (more than C ₃)	Whole reagent is changed to Pale brown.	"	
Aromatic hydrocarbons	"	"	
Esters	"	"	
Ketones	"	"	
Halogenated hydrocarbons FIG.1	"	"	

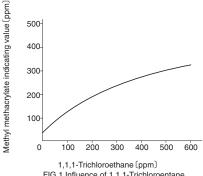
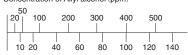


FIG.1 Influence of 1,1,1-Trichloroentane

TEMPERATURE CORRECTION TABLE

Tube	Corrected 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

Concentration of Allyl alcohol (ppm)



No.184S tube reading (ppm)