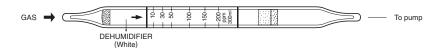
PENTYL ACETATE



1. PERFORMANCE

1) Measuring range $\begin{array}{c} \text{10-200 ppm} \\ \text{Number of pump strokes} \end{array}$

2) Sampling time : 4.5 minutes/3 pump strokes

3) Detectable limit \therefore 4 ppm 4) Shelf life \therefore 2 years 5) Operating temperature \therefore 10 \sim 40 $^{\circ}$ C

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE") 7) Reading : Direct reading from the scale calibrated by 3 pump strokes

8) Colour change : Pale yellow→Pale blue (more than 20 ppm)

→ Dark brown (20 ppm or less)

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromium oxide is reduced.

 $CH_3CO_2(CH_2)_4CH_3 + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence Higher readings are given.	
Alcohols	Similar or Brown stain is produced.		
Esters	"	"	
Ketones	"	"	
Aromatic hydrocarbons	The accuracy of readings is not affected.	Whole reagent is changed to Brown ot but if the maximum end point of the stain is discernable, the accuracy o readings is not affected.	
Aliphatic hydrocarbons (more than C ₃)	"	"	
Halogenated hydrocarbons		"	

TEMPERATURE CORRECTION TABLE

Tube	Corrected Concentration (ppm)				
Readings (ppm)	10 °C (50 °F)	20 ℃ (68 °F)	30 °C (86 °F)	40 °C (104 °F)	
200	240	200	160	120	
150	180	150	130	100	
100	120	100	80	70	
50	60	50	40	30	
30	36	30	24	18	
10	10	10	8	6	