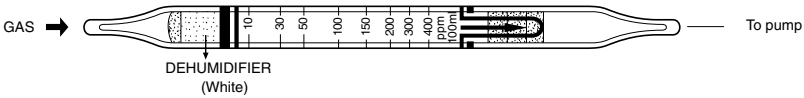
Tube No.
188U

ISOPENTYL ACETATE



1. PERFORMANCE

1) Measuring range : 10-400 ppm
   Number of pump strokes 1 (100mℓ)
2) Sampling time : 1.5 minutes/1 pump stroke
3) Detectable limit : 4 ppm
4) Shelf life : 1 year
5) Operating temperature : 10 ~ 40℃
6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
7) Reading : Direct reading from the scale calibrated by 1 pump stroke
8) Colour change : Pale yellow → Pale blue (The top of discoloured layer is Brown, but read at the top of Pale blue.)

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Potassium dichromate is reduced

$$CH_3CO_2(CH_2)_2CH(CH_3)_2 + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence
Esters	Similar stain is produced.	Higher readings are given.
Alcohols FIG.1	〃	〃
Ketones	〃	〃
Aromatic hydrocarbons	Whole reagent is changed to Pale brown.	〃

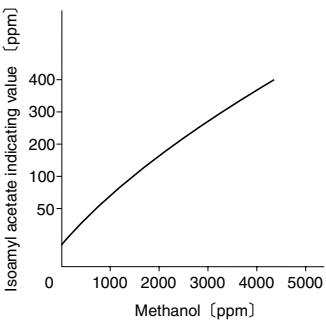


FIG.1 Influence of Methanol

TEMPERATURE CORRECTION TABLE

Scale Readings (ppm)	True Concentration (ppm)						
	10℃ (50°F)	15℃ (59°F)	20℃ (68°F)	25℃ (77°F)	30℃ (86°F)	35℃ (95°F)	40℃ (104°F)
400	—	—	400	240	190	160	140
300	—	—	300	200	160	140	120
200	—	360	200	150	125	110	95
150	—	230	150	120	100	90	80
100	—	135	100	85	75	67	60
50	80	60	50	45	40	35	35
30	40	35	30	30	25	25	25
10	10	10	10	10	10	10	10