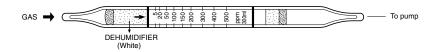
MESITYL OXIDE



1. PERFORMANCE

1) Measuring range 5-100 ppmNumber of pump strokes $2(200 \text{m} \ell)$

2) Sampling time : 3 minutes/2 pump strokes

3) Detectable limit : 1 ppm 4) Shelf life : 2 years 5) Operating temperature : $0 \sim 40 \, ^{\circ}$ C

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")

7) Reading Graduations printed on the tube are calibrated by Ethyl cellosolve at 3 pump strokes

and Mesityl oxide is determined by using a conversion chart.

8) Colour change : Yellow→Pale blue

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromium oxide is reduced.

 $CH_3COCH = C(CH_3)_2 + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

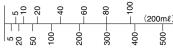
4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm Interference		ppm	Coexistence
Alcohols		Similar stain is produced.		Higher readings are given.
Toluene	200	Whole reagent is discoloured to Brown.	500	The top of discoloured layer becomes unclear.
Hexane		The accracy of reading is not affected.	less than 1,000ppm	The accracy of reading is not affected.
Ethyl Acetate		"		"
Trichloroethylene		"		"

Mesityl oxide (ppm)



No.190U Tube reading (ppm)

TEMPERATURE CORRECTION TABLE

Conver.	Corrected Concentration (ppm)			
value (ppm)	0°C (32°F)	10 °C (50 °F)	20 ℃~40 ℃ (68* F) (104* F)	
100	_	-	100	
80	_	95	80	
60	100	70	60	
40	60	45	40	
20	30	25	20	
10	15	12	10	
5	7	6	5	