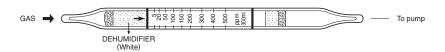
MESITYL OXIDE



1. PERFORMANCE

1) Measuring range $\begin{array}{c} \text{5-100 ppm} \\ \text{Number of pump strokes} \end{array}$

2) Sampling time : 3 minutes/2 pump strokes

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

6) Temperature compensation : Necessary (0 \sim 20 °C) (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.

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

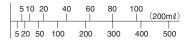
4. CALIBRATION OF THE TUBE

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. 1,000ppm	less than affected.	The accracy of reading is not
Ethyl Acetate		"		"
Trichloroethylene		"		"

Mesityl oxide (ppm)



No.190U Tube reading (ppm)

TEMPERATURE CORRECTION TABLE

Conversion	Corrected Concentration (ppm)				
Value (ppm)	0°C (32°F)	10 ℃ (50 °F)	20 °C ~ 40 °C (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		