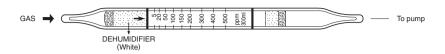
MESITYL OXIDE



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 \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			