METHYL ISOBUTYL KETONE



1. PERFORMANCE

1) Measuring range : 5-300 ppm Number of pump strokes 1 (100mL)

2) Sampling time : 1.5 minutes/1 pump stroke

3) Detectable limit : 2 ppm 4) Shelf life : 2 years 5) Operating temperature : $0 \sim 40$ °C

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

7) Reading : Direct reading from the scale calibrated by 1 pump stroke

8) Colour change : Yellow→Pale blue

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromium oxide is reduced. $(CH_3)_2 CHCH_2COCH_3 + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence	
Alcohols	Similar stain is produced.	Higher readings are given.	
Ethers	"	"	
Aliphatic hydrocarbons (more than C ₃)	Whole reagent is changed to Pale brown.	"	
Aromatic hydrocarbons	"	"	
Esters	"	"	
Ketones	"	"	
Halogenated hydrocarbons	"	"	

TEMPERATURE CORRECTION TABLE

Scale	True Concentration (ppm)					
Readings	0°C	10 °C	20 °C	30 °C	40 °C	
(ppm)	(32°F)	(50°F)	(68° F)	(86°F)	(104°F)	
300	-	-	300	230	190	
250	-	380	250	195	165	
200	-	290	200	155	130	
150	355	210	150	120	100	
100	220	130	100	80	70	
50	90	65	50	40	35	
30	55	40	30	25	25	
10	15	10	10	8	8	
5	7	5	5	5	5	