CUMENE



1. PERFORMANCE

1) Measuring range 20-140 ppmNumber of pump strokes $1(100\text{m}\ell)$

2) Sampling time : 1.5 minutes/1 pump stroke

3) Detectable limit : -4) Shelf life : 2 years
5) Operating temperature : $15 \sim 25$ °C

6) Reading : The tube scale is calibrated based on Ethyl acetate at 1 pump stroke and

Cumene concentration is determined by using a conversion chart

at 1 pump stroke
7) Colour change : Yellow→Brown

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromium oxide is reduced.

 $C_6H_5CH(CH_3)_2 + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence
Alcohols	Similar or brown stain is produced.	Higher readings are given.
Esters	"	"
Ketones	"	"
Aromatic hydrocarbons	"	"
Aliphatic hydrocarbons	Whole reagent is discoloured to Pale brown.	If the maximum end point of stained layer is discernable, the accuracy of readings is not affected.
Halogenated hydrocarbons	"	"



