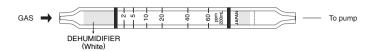
ISOBUTYL ACRYLATE



1. PERFORMANCE

1) Measuring range 5-60 ppmNumber of pump strokes $2(200 \text{m} \ell)$

2) Sampling time : 3 minutes/2 pump strokes

3) Detectable limit : 0.5 ppm4) Shelf life : 2 years5) Operating temperature $: 0 \sim 40 \,^{\circ}\text{C}$

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

 Reading
Graduations printed on the tube are calibrated by Methyl acrylate at 2 pump strokes and Isobutyl acrylate concentration is determined by using a conversion chart.

8) Colour change : Yellow→Pale blue

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromium oxide is reduced.

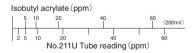
 $CH_2 = CHCO_2CH_2CH(CH_3)_2 + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

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



TEMPERATURE CORRECTION TABLE

Conversion	Corrected Concentration (ppm)				
Value (ppm)	0 °C (32 °F)	10 °C (50 °F)	20 °C (68 °F)	30 ℃ (86°F)	40 °C (104 °F)
60	_	90	60	48	40
40	115	57	40	32	27
20	50	27	20	16	14
10	20	13	10	8	6
5	10	6	5	4	3