

No.188U

KITAGAWA
ISOPENTYL ACETATE (ISOAMYL ACETATE) LENGTH-OF-STAIN DETECTOR TUBES
(Type U)
(Direct Reading Type)

PERFORMANCE:

Measuring Range :	10 - 400 ppm
Sampling Time :	1.5 minutes (1 pump stroke)
Colour Change :	Pale yellow - Pale blue (The top of discoloured layer changes to Brown.)
Detectable Limit :	4 ppm
Storage Condition:	In a cool and dark place, not to exceed 25°C (77°F)

*FLOW CONTROL ORIFICE SHOULD NOT BE USED WITH THIS TUBE.

SAMPLING AND MEASUREMENT:

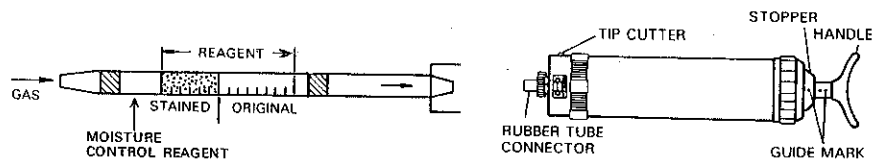


Fig. 1

1. Break both ends of a new detector tube by using the tip cutter, and insert the detector tube end securely according to the direction of printed arrow mark into the rubber tube connector as shown in Fig. 1.
2. Align the guide marks (red dots) on the shaft and stopper of the pump. Pull the handle at a full stroke and wait for 1.5 minutes. (In case of using the previous Model 400, turn the handle by 1/4 to lock after pulling it.)
3. Remove the detector tube from the connector on the completion of the sampling. A reading can be obtained directly from the scale printed on the detector tube.

SPECIAL NOTE

When the top of the discoloured layer is made obliquely, read the concentration at the centre between the longest and the shortest points of the discoloured layer. The total stain length should be read, even if the stained layer gets multi-colour discolouration.

CORRECTION FOR AMBIENT CONDITIONS:

Temperature;

The scale is calibrated based on the temperature of 20°C (68°F). Readings obtained in other temperature circumstances should be corrected with the following temperature correction table.

Scale Readings (ppm)	True Concentration (ppm)						
	10°C (50°F)	15°C (59°F)	20°C (68°F)	25°C (77°F)	30°C (86°F)	35°C (95°F)	40°C (104°F)
400	-	-	400	240	190	160	140
300	-	-	300	200	160	140	120
200	-	360	200	150	125	110	95
150	-	230	150	120	100	90	80
100	-	135	100	85	75	67	60
50	80	60	50	45	40	35	35
30	40	35	30	30	25	25	25
10	10	10	10	10	10	10	10

Humidity;

No corrections are necessary.

Atmospheric Pressure;

Tube readings can be corrected by using either the following equation:
True concentration = Tube reading x 1013 / (Atmospheric pressure in mbar)
or True concentration = Tube reading x 760 / (Atmospheric pressure in mmHg)

INTERFERENCES:

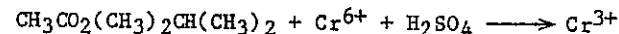
Esters, Alcohols or Ketones produce similar stains and give higher reading. Aromatic hydrocarbons change the whole reagent to Pale brown and give higher reading.

HAZARDOUS, DANGEROUS PROPERTIES OF ISOPENTYL ACETATE:

T.L.V.** : 100 ppm
Explosive range in air: 1.0 - 7.5 %

**Threshold Limit Value established by the American Conference of Governmental Industrial Hygienists, 1987.

CHEMICAL REACTION IN THE DETECTOR TUBE:



INSPECTION OF ASPIRATING PUMP:

Before testing, the pump shall be checked for proper performance. Leakage of air will affect accuracy of readings. The leakage check should be carried out by pulling the handle fully with an unopened tube into the connector and waiting for 3 minutes. If the handle comes back thoroughly to the original position when the lock is released, the performance is good. When the handle does not come back to the original position completely, give maintenance to the pump referring to the relevant description in the instruction manual of the pump. Then, confirm the pump by carrying out this inspection procedure again.

CAUTION:

Keep the detector tubes out of the reach of children and used tubes should be discarded carefully according to relevant regulations.