

#5D

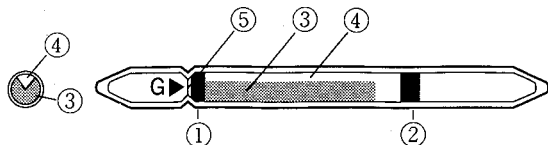
GASTEC

PASSIVE DOSIMETER TUBE FOR SULFUR DIOXIDE

GENERAL :

The Gastec Passive Dosimeter Tube No. 5D provides the measurement of the mean value of SULFUR DIOXIDE in air by the principle of diffusion sampling. No air sampling equipment such as aspiration pump, motor driven air sampler is needed for the measurement. The calibration marks printed on each tube indicates PPM × Hour and the mean value can be obtained by dividing the sampling time measured.

PERFORMANCE :

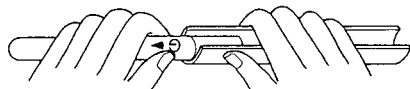


- 1 2 Upper and Lower End Plug Packing
- 3 Diffuser
- 4 Analyzing Reagent
- 5 Score

Calibration Scale	2—100 ppm·hour			
Color Change	Green—Yellow			
Measuring Range	2—100ppm	0.5—25ppm	0.25—12.5ppm	0.2—10ppm
Sampling Hours	1	4	8	10
Detecting Limit	—	—	—	0.1 ppm

SHELF LIFE :

Please refer to the term of validity of a label of a Detector Tube Box.



1. Prepare passive dosimeter tube and dosi-tube holder No. 710.
2. Record the measurement starting time on the peel off numbered label in each box of the tube and put the label on the tube.

3. Break the tube at the score of the tube with Gastec passive dosi-tube holder. Insert a part of the tube in the tube holder where the tube can be broken at the score and break the tube carefully. Remove the broken part of the tube and discard it carefully from the tube holder.
4. Insert the analyzing tube end into the tube holder. For personal sampling, put the dosi-tube holder to the shirt collar of the personnel or workplace where the measurement is required.
5. To protect the tube holder of shirt collar from dropping during operation, support the tube holder with string through a small hole of the tube holder.
6. Measurement concentration can be obtained from an hour sampling. 4—10 hours sampling time is recommended.
7. When the sampling is finished, record the time on the label of the tube and calculate the actual sampling time.
8. The averaged gas concentration can be obtained by the following formula :

$$\text{Average Concentration (ppm)} = \frac{\text{Dosi-Tube Reading (ppm} \cdot \text{hours)}}{\text{Actual Sampling Time}}$$

CORRECTION FOR TEMPERATURE, HUMIDITY AND PRESSURE :

Calibration of the Gastec passive dosimeter tube No. 5D is based on a tube temperature of 20°C (68°F) and approximately 50% relative humidity and normal atmospheric pressure.

1. No correction is required for temperature range of 0—40°C (32—104°F) and relative humidity range of 0—100%.
2. Pressure correction is not required.

INTERFERENCES :

Substance	Concentration	Interference	Changes color by itself to
Hydrogen sulfide		+	} No
Nitrogen dioxide		-	

DANGEROUS AND HAZARDOUS PROPERTIES :

Threshold Limit Value-Time Weighted Average (TLV-TWA) by ACGIH (1996) : 2 ppm (7—8 hours)

Threshold Limit Value-Short Term Exposure Limit (TLV-STEL) by ACGIH (1996) : 5 ppm (15 minutes)

Store the tubes at below 25°C (77°F) and dark place.

Manufacturer : Gastec Corporation
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98E-5D-1
Printed in Japan