GASTEC No.12D Instructions for Hydrogen Cyanide Passive Dosi-Tube

FOR SAFE OPERATION :

Carefully read this manual before use.

⚠ CAUTION : If you do not observe the following precautions, you may suffer injuries or damage the product.

1. When breaking the Passive Dosi-Tube, keep away from eyes.
2. Do not touch the broken glass tubes, pieces and reagent with bare hand(s).

△NOTES : For maintaining performance and reliability of the test results, observe the following.

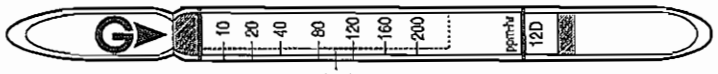
1. Use this tube within the temperature range of 0 - 40°C (32 - 104°F).
2. Use this tube within the relative humidity range of 0 - 90%.
3. This tube may be interfered with by the coexisting gases. Please refer to the "INTERFERENCES" below.
4. The shelf life and storage condition of the Passive dosi-tube are marked on the label of the tube box.

APPLICATION OF THE TUBE :

Use this tube for detecting Hydrogen Cyanide in the air or in industrial areas and for determining the environmental atmospheric condition.

SPECIFICATION :

(Because of Gastec's commitment to continued improvement, specifications are subject to change without notice.)



Detecting Layer

Measuring Range	1– 200 ppm
Sampling Hours	1 – 10 hours
Detecting Limit	0.3 ppm (10 hours)
Colour Change	Yellow → Pink
Reaction Principle	Hydrogen Cyanide reacts with the reagent to form intermediate material which stains indicator pink

Coefficient of Variance: 10% (for 10 to 200 ppm·hr)

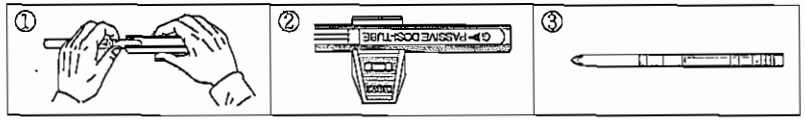
**** Shelf Life : Please refer to the validity date printed on the tube box.**

**** Store the tubes in a dark and cool place.**

CORRECTION FOR TEMPERATURE, HUMIDITY AND PRESSURE :

Temperature : No correction is required.
Humidity : No correction is required.
Pressure : No correction is required.

MEASUREMENT PROCEDURE :



1. Break tips off a fresh tube with Gastec Passive Dosi-Tube Holder No.710.
2. Set the Dosi-tube in the Tube Holder firmly inside the holder so the broken part is not appeared from the edge of the holder. 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. For personal sampling, put the dosi-tube holder to the shirt collar of the personnel or workplace where the measurement is required. When the sampling is finished, record the time on the label of the tube.
4. Calculate gas concentration by the following formula:

$$\text{Average Concentration} = \frac{\text{Dosi-Tube Reading (ppm·hour)}}{\text{Sampling Tme (hours)}}$$

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.

INTERFERENCES :

Substance	Concentration	Interference	Interference gas only
Basic gases		-	No discolouration
Acid gases		+	Pink
Nitrogen Dioxide	≧ 0.5 ppm	+	Pink
Hydrogen Sulphide		+	Pink

This table of interference gases primarily expresses the interference of each coexisting gas in the concentration range, that is equivalent to the gas concentration. Therefore, the test result may show positive results due to other substances not listed in the table. If more information is needed, please contact us or our distributors in your territory.

DANGEROUS AND HAZARDOUS PROPERTIES :

Threshold Limit Value-Ceiling by ACGIH (2011): 4.7 ppm

INSTRUCTIONS ON DISPOSAL :

The reagent of the tube does not use toxic substances. When disposing the tube regardless of whether it has been used or not, follow the rules and regulations of your local government.

WARRANTY :

If you have any questions regarding gas detection and the quality of the tubes, please feel free to contact your Gastec representatives.

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