

GASTEC Instructions for No.8TP Chlorine Detector Tube

FOR SAFE OPERATION :

Read this manual and the instruction manual of your Air Sampling Pump carefully.

⚠ CAUTION : If not observed, injuries to the operator or damage to the product may result.

1. When breaking the tube ends, 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 to the test results.

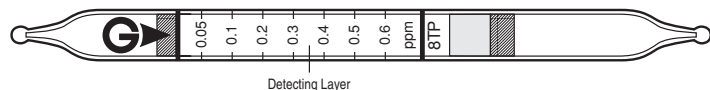
1. Recommend to use Gastec Gas Sampling device Model GSP-300FT-2 together with Gastec Detector Tubes only for the purposes specified in the instruction manual of the detector tube.
2. Use this tube under the temperature range of 0 - 40°C (32 - 104°F).
3. Use this tube under the relative humidity range of 10-90%.
4. This tube may be interfered with by the coexisting gases. Please refer to the "INTERFERENCES".
5. Shelf life and storage condition of the tube is marked on the label of the box of tube.

APPLICATION OF THE TUBE :

Use this tube for the detection of chlorine in air of environmental atmospheric condition.

SPECIFICATION :

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



Measuring Range	0.05 - 0.6 ppm
Sampling Range	100 ml/min
Correction Factor	1
Sampling Time	10 minutes
Detecting Limit	0.02 ppm (1,000 ml)
Color Change	Pink → White
Reaction Principle	Chlorine oxidizes to discolor the indicator to white. $\text{Cl}_2 + \text{Indicator} \rightarrow \text{Reaction Product (White)}$

**** Shelf Life : Please refer to the Validity Date printed on the box of tube.**

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

CORRECTION FOR TEMPERATURE, HUMIDITY AND PRESSURE :

Temperature : No correction is required.

Humidity : No correction is required for 10 - 90% R.H.

Pressure : To correct for pressure, multiply by the tube reading by

$$\frac{\text{Tube Reading (ppm)} \times 1013 \text{ (hPa)}}{\text{Atmospheric Pressure (hPa)}}$$

MEASUREMENT PROCEDURE :

If automatic air sampler Model GSP-300FT-2 is used

1. Prior to operation please confirm if black color inlet rubber tube holder is equipped with the sampler.
2. Break both end of the tips of the detector tube with the tube tip holder supplied. Connect the detector tube to the pump with arrow (➔) on the tube pointing toward pump.
3. Set the flow meter at 100 ml/min and timer to "10 minutes" of the sampler. Press the power switch of the sampler to start the sampling.
4. After the sampling, remove the detector tube from the sampler.
5. Read the concentration from the length of discoloration of the tube.
6. If correction is needed, multiply the correction factors of pressure.

INTERFERENCES :

Substance	Concentration	Interference	Changes color by itself to
Ammonia	$\geq 1/6$	Minus error	No discoloration
Sulfur dioxide		Minus error	No discoloration
Nitrogen dioxide		No effect	No discoloration
Hydrogen sulfide		Minus error	No discoloration

The table of this interference gases primarily expresses the interference of each coexisting gas in the gas concentration range, equivalent to the gas concentration. Therefore, the test result may be given positive result by the other substances not listed in the table. For more information is needed, please contact us or distributors in your territory.

DANGEROUS AND HAZARDOUS PROPERTIES :

Threshold Limit Value-Time Weighted Average by ACGIH (2004) : 0.5 ppm

Threshold Limit Value-short Term Exposure Limit by ACGIH (2004) : 1 ppm

DISPOSAL INSTRUCTION :

Reagent of the tube does not use the toxic substances. When disposing the tube regardless of used or unused, follow the rules and regulations of the local government.

WARRANTY :

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

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