

# GASTEC Instructions for No.131P Vinyl Chloride 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 result

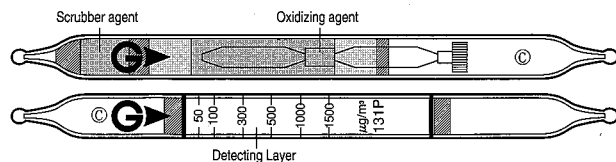
1. Recommend to use Gastec Gas Sampling device Model GSP-300FT-2. (if not available use the air sampler of equivalent to sample for 100ml/min ) together with Gastec Detector Tubes only for the purposes specified in the instruction manual of the detector tube.
2. Use this tube under the temperature range of 5 - 35°C(41 - 95°F).
3. Use this tube under the relative humidity range of 20 - 80%.
4. This tube may be interfered 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 p-Dichlorobenzene 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	50 - 1500 µg/m³
Sampling Rate	100 ml/min
Correction Factor	1
Sampling Time	30 minutes
Detecting Limit	10 µg/m³ (3000ml)
Color Change	Yellow → Pale reddish purple
Reaction Principle	Vinyl chloride is oxidized to produce hydrogen chloride to produce pale reddish purple stain.

**\*\* 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 :** Correct for temperature by the table below:

Tube reading (µg/m³)	5°C (41°F)	10°C (50°F)	15°C (59°F)	20°C (68°F)	25°C (77°F)	30°C (86°F)	35°C (95°F)
1500	2000	1750	1650	1500	1400	1250	1000
1000	1450	1250	1150	1000	900	750	550
500	800	650	580	500	450	300	150

Tube reading (µg/m³)	5°C (41°F)	10°C (50°F)	15°C (59°F)	20°C (68°F)	25°C (77°F)	30°C (86°F)	35°C (95°F)
300	530	420	380	300	250	120	50
100	240	180	140	100	70	30	20
50	150	110	80	50	40	20	10

**Humidity :** No correction is required for 20 - 80%R.H.

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

$$\frac{\text{Tube Reading } (\mu\text{g}/\text{m}^3) \times 1013 \text{ (hPa)}}{\text{Atmospheric Pressure (hPa)}}$$

## MEASUREMENT PROCEDURE :

If automatic air sample 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 primary tube and analyzer tube by the tube tip holder supplied. Connect both tubes with rubber tubing supplied in the box of tubes.
3. Insert the analyzer tube securely into pump inlet with arrow (G) on the tube pointing toward pump.
4. Set the flow meter 100 ml/min and timer to "30 minutes" of the sampler. Press the power switch of the sampler to start the sampling.
5. After the sampling, remove the detector tube from the sampler.
6. Read concentration from the length of discoloration of the tube.
7. If correction is needed after sampling, multiply the correction factor of the temperature, sampling volume and Pressure respectively.

## INTERFERENCES :

Name of Gas	Interference	Change color by itself
Ammonia	No effect	No discoloration
Hydrogen chloride, Chlorine	No effect	No discoloration
Nitrogen oxides	No effect	No discoloration
p-Dichlorobenzene	Plus error	Pale reddish purple
1,2-Dichloroethylene	Plus error	Pale reddish purple
Trichloroethylene, Tetrachloroethylene	Plus error	Pale reddish purple
1,1,1-Trichloroethane	No effect	No discoloration
Aromatic hydrocarbons	No effect	No discoloration
Formaldehyde	No effect	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 distributors in your territory .

## DISPOSAL INSTRUCTION :

Reagent of the tube uses toxic lead. On 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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