

GASTEC Instructions for No.151TP Acetone 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.

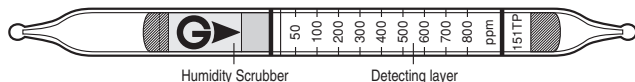
1. Recommend to use Gastec Gas Sampling device Model GSP-300FT-2 (if not available use the air sampler of equivalent to sample for 100 mL/min) together with Gastec Detector Tubes only for the purposes specified in the instruction manual of the detector tube.
2. Use this tube under the temperature range of 0 - 35 °C (32 - 95 °F).
3. Use this tube under the relative humidity range of 0 - 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 Acetone 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	25 - 800 ppm
Sampling Rate	100 mL/min
Correction Factor	1
Sampling Time	10 minutes
Detecting Limit	10 ppm (1000 mL)
Colour Change	Yellow - Red
Reaction Principle	$3\text{CH}_3\text{COCH}_3 + (\text{NH}_2\text{OH})_2\text{H}_3\text{PO}_4 \rightarrow \text{H}_3\text{PO}_4$

Coefficient of Variation: 10% (for 25 to 300 ppm), 5% (for 300 to 800 ppm)

**** 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:

Temperature C (°F)	0 (32)	5 (40)	10 (50)	15 (59) - 20 (68)	25 (77)	30 (86)	35 (94)
Correction factor	1.3	1.2	1.1	1.0	0.9	0.8	0.7

Humidity: No correction is required for 0 - 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 colour inlet rubber tube holder is equipped with the sampler.
2. Break both end of the tips of the tube by the tube tip holder supplied.
3. Insert the tube securely into pump inlet with arrow (G) on the tube pointing toward pump.
4. Set the flow metre at 100 mL/min and timer to "10 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 the concentration from the length of discolouration of the tube.
7. If correction is needed after sampling, multiply the correction factor of the temperature, sampling volume and pressure respectively.

INTERFERENCES:

Substance	Interference	Changes colour by itself to
Alcohols, Esters	+	No
Aldehydes, Ketones	+	Red
Aromatic hydro carbons	No	No

The table of this interference gasses 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.

DANGEROUS AND HAZARDOUS PROPERTIES :

Threshold Limit Value-Time Weighted Average by ACGIH (2007): 500 ppm

Threshold Limit Value-Short Term Exposure Limit by ACGIH (2007): 750 ppm

DISPOSAL INSTRUCTION :

Reagent of the tube does not use the toxic substances. When dispose of 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.

Manufacturer : Gastec Corporation
8-8-6 Fukayanaka, Ayase-City, 252-1195, Japan

<http://www.gastec.co.jp/>

Telephone +81-467-79-3910 Facsimile +81-467-79-3979

IM01151TPE1
Printed in Japan
07G1Z