

GASTEC Instructions for No.152TP Methyl Ethyl Ketone Detector Tube

FOR SAFE OPERATION :

Carefully read this manual and the instruction manual of your Gastec Gas Sampling Pump.

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

- When breaking the tube ends, keep away from eyes.
- Do not touch the broken glass tubes, piece and reagent with bare hand(s).

△ NOTES : For maintaining performance and reliability to the test results.

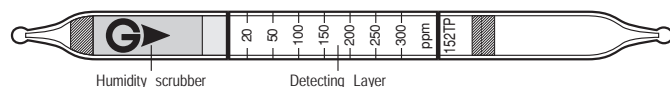
- Recommend to use Gastec Gas Sampling device Model GSP-300FT-2 (if not available use the air sampler of equivalent to sample for 100 mL/min) together with Gastec Detector Tubes only for the purposes specified in the instruction manual of the detector tube.
- Use this tube under the temperature range of 0 - 40°C (32 - 104°F).
- Use this tube under the relative humidity range of 0 - 90%.
- This tube may be interfered by the coexisting gases. Please refer to the "INTERFERENCES".
- Shelf life and storage conditions of the tube is marked on the label of the box of tube.

APPLICATION OF THE TUBE :

Use this tube for the detection of Methyl Ethyl Ketone 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	20 - 300 ppm
Sampling Rate	100 mL/min
Correction Factor	1
Sampling Time	10 minutes
Detecting Limit	5 ppm (1000mL)
Colour Change	Yellow → Red
Reaction Principle	Methyl Ethyl Ketone reacts with agent to produce intermediate material and indicator turns red.

Coefficient of Variation : 10% (for 20 to 100 ppm), 5% (for 100 to 300 ppm)

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

**** Store the tubes in the refrigerator to keep at 10°C (50°F) or below.**

CORRECTION FOR TEMPERATURE, HUMIDITY AND PRESSURE

Temperature : Correct for temperature by the table below:

Temperature°C (°F)	0 (32)	5 (41)	10 (50)	15 (59)	20 (68)	25 (68)	30 (86)	35 (95)	40 (104)
Correction Factor	1.55	1.40	1.30	1.15	1.00	0.90	0.75	0.65	0.55

Humidity : No correction is required for 0 - 90 %R.H.

Pressure : To correct for pressure, multiply 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

- Prior to operation please confirm if black colour inlet rubber tube holder is equipped with the sampler.
- Break both end of the tips of the tube by the tube tip holder supplied.
- Insert the tube securely into pump inlet with arrow **G** on the tube pointing toward pump.
- Set the flow meter at 100 mL/min and timer to "10 minutes" of the sampler. Press the start switch of the sampler to start the sampling.
- After the sampling, remove the detector tube from the sampler.
- Read concentration at the interface of the stained-to-unstained reagent.
- If necessary, multiply the correction factor of the temperature and atmospheric pressure respectively.

INTERFERENCES :

Substance	Concentration	Interference	Interference gas only
Ammonia		No	No discoloration
Aldehydes		+	Red
Ketones		+	Red
Acetic Acid	≤ 50 ppm	No	Purple at 70ppm
Ethyl acetate		+	No discoloration
Diethyl ether	≤ 150 ppm	No	No discoloration
Trichloroethylene		No	No discoloration
Toluene		No	No discoloration
Hexane		No	No discoloration
Benzene		No	No discoloration
Methanol	≤ 150 ppm	No	No discoloration

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 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 (2009): 200ppm

Threshold Limit Value-Short Time Explosive Limit by ACGIH (2009): 300ppm

DISPOSAL INSTRUCTION :

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

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