GASTEC No.107 Instructions for Polytec I Qualitative Analysis Test Tube

FOR SAFE OPERATION :

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

⚠ WARNING:

1. Use only Gastec detector tubes in a Gastec Pump.
2. Do not interchange or use non-Gastec parts or components in Gastec's detector tube and pump system.
3. The use of non-Gastec parts or components in Gastec's detector tube and pump system or use of a non-Gastec detector tube with a Gastec pump or use of a Gastec detector tube with a non-Gastec pump may result in property damage, serious bodily injury, and death; voids all warranties; and voids all performance and data accuracy guaranties

⚠ 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).
3. The sampling time represents the time necessary to draw the air sample through the tube. The tube must be positioned in the desired sampling area for the entire sampling time or until the flow finish indicator indicates the end of the sample.

△NOTES : For maintaining performance and reliability of the test result

1. Use Gastec Gas Sampling Pump 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℃(32 - 104℉).
3. Use this tube under the relative humidity range of 0 - 90%.
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 of this tube for the Qualitative Analysis for Unknown Gases Listed in the Specifications in air or the industrial areas and environmental atmospheric condition.

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

Detecting Layer

Measuring Range	Qualitative
Number of Pump Strokes	3
Correction Factor	——
Sampling Time	1 minute per pump stroke
Detecting Limit	——
Color Change	Refer to Table 1
Reaction Principle	The substances reduces iodine pentoxide to liberate iodine, which produces a brown or green color

**** Shelf Life : Please refer to the Validity Date printed on the box of tube.**
**** Store the tubes in the dark and cool place.**

MEASUREMENT PROCEDURE :

1. For leak tight check of the pump insert a fresh sealed detector tube into pump. Follow instructions provided with the pump operating manual.
2. Break tips off a fresh detector tube in the tube tip breaker of the pump.
3. Connect both tubes with rubber tubing supplied in the box of tubes.
4. Insert the tube securely into pump inlet with arrow (G►) on the tube pointing toward pump.
5. Make certain pump handle is all the way in. Align guide marks on pump body and handle.
6. Pull handle all the way out until it locks on 1 pump stroke (100ml). Wait 1 minute. Repeat above sampling procedure 2 more times, then refer to the table below :

Table 1 Color Change

Substance	Concentration (ppm)	Concentration
Carbon monoxide	10	Green to Brown
Carbon dioxide	1	Green
Hydrogen sulfide	1	Green
Acetone	1000	Brown to Green
Acetylene	10	Brown to Green
Ethylene	70	Brown to Green
Gasoline	100	Brown
Styrene	10	Yellw to Green
Trichloroethylene	15	Pale Green
Toluene, Xylene	10	Purple
Propane, Propylene	100	Brown
Benzene	20	Brown

DISPOSAL INSTRUCTION : Reagent of the tubes use chromic acid. 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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