

Detector Tube

Multigas-IV

Part No.: D7094871



Instructions for Use

1 Application

This tube can be used for the Qualitative analysis for gases listed in Table-1 in air or industrial areas and environmental atmospheric condition.

2 Detector Tube Sampling Pump

Kwik-Draw Pump , Gas-Tester I/II, Gas-Tester I / Thumb Pump -Sampler, Toximeter II /III, or other suitable detector tube pumps. Observe respective instructions for use.

3 Measuring Range

Qualitative. Number of pump strokes: 1 (100 ml).

4 Chemical Reaction and Color Change

The tube contains five different indicating layers. On drawing the sample air containing one or more of twelve gases which can be detected by this tube, the indicating layer changes its colour following the chart given below. See Table-1.

5 Sampling Procedure

- Check detector tube pump for leakage.
- Break off both ends of the tube using tip breaker.
- Insert detector tube tightly into pump.
Gas-Tester, Kwik-Draw Pump, ThumbPump Sampler: Arrow on tube must point towards pump.
Toximeter II: Insert tube into inlet side (white arrow). Arrow on tube must point towards pump.
- Perform 1 stroke.
- Read concentration at end of color zone within 2 minutes after sampling.
- Duration of one pump stroke: 60 seconds.

Table - 1

Gas Name	Concentration (ppm)	Colour change / Comments
Ammonia	40	Yellow to Blue
	5	Yellow to Blue
Amines	50	Yellow to Blue
	5	Yellow to Blue
Sulphur Dioxide	20	Blue to Yellow
	2	Blue to Yellow
Acetic Acid	50	Blue to Yellow
Hydrogen Chloride	300	Blue to Yellow
Chlorine	20	Blue to Yellow
	5	Blue to Yellow
Nitrogen Dioxide	20	Blue to Violet
	5	White to Yellow
Hydrogen Sulphide	20	White to Brown
	10	White to Brown
Carbon Monoxide	50	Whole layer changes Yellow to brown
	10	Whole layer changes Yellow to light brown
Phosphine	30	Yellow to Black
	2	Yellow to Black
Acetylene	600	Whole layer changes Yellow to dark brown
Mercaptan	10	Yellow to Dark brown
	100	Yellow to Dark brown

6 Ambient Conditions During Sampling

- Detector tubes can be used between 0°C and 40°C (32°F and 104°F) and between 10% R.H (0.9 g/m³ at 10°C [50°F]) and 90% R.H. (27 g/m³ at 30°C [86°F]).
- Pressure compensation:

Multiply reading (in vol.%) with compensation factor F.

$$F = \frac{1013(\text{mbar})}{\text{actual atm. pressure (mbar)}} = \frac{760(\text{mmHg})}{\text{actual atm. pressure (mm Hg)}}$$

7 Storage and Transport

Up to 25°C (77°F) and protected from light.
Expiration date: see back of package.

8 Safety Advice / Disposal

For tubes contents the following indications of danger apply:

Indications of danger R: 20/21/22-35-37.

Safety advice S: 2-23-24/25-26-28 (water).

Tubes must be kept away from unauthorized persons. For disposal as waste observe the legal regulations applicable in the individual country of use.