

Detector Tube

H₂S-0.2 %/a

Part No.: D7086910

KWIK[®]DRAW
UNIPHOS

Instructions for Use

1 Application

Detection of hydrogen sulfide (H₂S) in air or in technical gases.

2 Detector Tube Sampling Pump

Kwik-Draw Pump, Gas-Tester II H, or other suitable detector tube pumps. Observe respective instructions for use.

3 Measuring Change

(0.2...7) Vol.% hydrogen sulfide at n=1 (1 stroke).

4 Chemical Reaction and Color Range

Reaction of hydrogen sulfide with copper compound forming copper sulfide.

Color change: light blue → grey/black.

5 Sampling Procedure

- Check detector tube pump for leakage.
- Break off both ends of the tube.
- Insert tube tightly into pump.
Kwik-Draw Pump, Gas-Tester II H: Arrow on tube must point toward pump.
- Perform 1 pump stroke.
- Read concentration at end of color zone within 2 minutes after sampling.
- Used detector tubes can not be used repeatedly.
- Duration of one pump stroke: 30...40 seconds.

6 Ambient Conditions During Sampling

- Detector tubes can be used between 0 °C and 60 °C (32 °F and 140 °F).
- Up to 90 % rh [75 g/m³ at 50 °C (120 °F)] water vapor will not affect accuracy of indication.
- Pressure compensation:
Multiply reading (vol.%) with compensation factor F.

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

7 Interferences and Cross Sensitivities

- a) No interference from:
 - hydrogen, methane, ethane, propane, butanes, carbon monoxide, carbon dioxide.
 - higher saturated hydrocarbons, olefinic hydrocarbons, aromatic hydrocarbons up to 10 vol.%
 - sulfur dioxide, carbon dioxide up to 1000 ppm.
- b) Comparable concentrations of mercaptans will interfere with the reading.

8 Overall Uncertainty

Up to ±15 % in the range above 1 vol.%.
(expressed as relative standard deviation)

9 Storage and Transport

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

10 Safety Advice/ Disposal

For tubes contents the following indications of danger apply:

Indications of danger R: 21/22-34 (H: 312/302-314).

Safety advice S: 2-24/25-26 (P:102-262/305+351+313).

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