

# Information Data Sheet

**Detector Tube**      **PH<sub>3</sub>-50**  
**Part No. (US):**      **489119**  
**Part No.**              **D5085831**

## 1. Application

Detection of phosphine (PH<sub>3</sub>) in air or in technical gases.

## 2. Detector Tube Sampling Pump

KWIK DRAW (formerly MSA AUER) Gas-Tester® IIH, Gas-Tester® I / ThumbPump™-Sampler, Toximeter® II, Uniphos Kwik-Draw™-Pump or other suitable detector tubes pumps. Observe respective instructions for use.

## 3. Measuring Range

50 ppm ... 2000 ppm phosphine at n=1 (1 stroke).

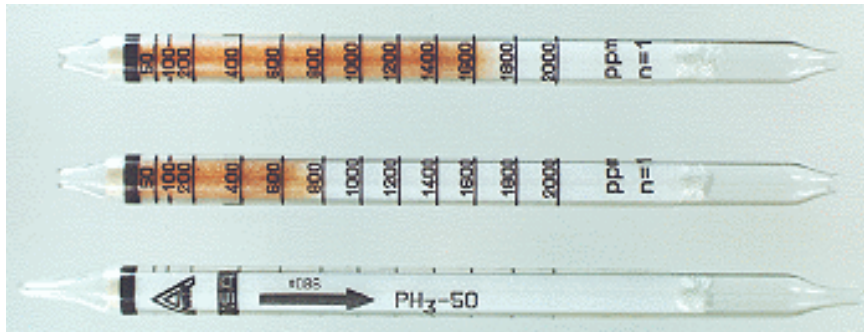
Any number of strokes from 1 to 10 can be chosen. For calculation use n=10 scale, relate as follows:

$$\text{ppm PH}_3 = \frac{10 \times \text{indication on } n=10 \text{ scale}}{\text{no. of strokes chosen}}$$

## 4. Chemical Reaction and Color Change

Reaction of phosphine with silver compound forming metallic silver.

Color change:    White      →      Brown



## 5. Ambient Conditions During Sampling

Detector tubes can be used without compensation of reading between 0 °C and 40 °C (32 °F and 104 °F) and between 10 % rh (0.5 g/ m<sup>3</sup> at 0 °C [32 °F]) and 90 % rh (46 g/ m<sup>3</sup> at 40 °C [104 °F]).

## 6. Interferences and Cross Sensitivities

- No interference from:
  - higher saturated hydrocarbons (e. g. hexanes, octanes), olefinic hydrocarbons (e. g. ethylene) aromatic hydrocarbons (e. g. benzene) up to 1 vol.% (n=10).
  - sulfur dioxide, carbon disulfide up to 1000 ppm (n=10).
- Arsine, stibine are indicated with lower sensitivity than phosphine.
- Hydrogen sulfide will be indicated by a yellow-brown stain, significantly lighter than phosphine stain and only one-half as long.
- Acetylene will not be indicated. Phosphine in acetylene gives a stain about twice as long as in air.

*Manufactured By:*  
**Uniphos Envirotronic Pvt. Ltd (100% EOU)**  
P.O. Nahuli - 396 108  
Tal. Umbergaon,  
Dist: Valsad, Gujarat, India  
Tel. : +91(260) 2730156 / 57 / 58  
Fax : +91(260) 2730160  
[gasdetection@uniphos-envirotronic.com](mailto:gasdetection@uniphos-envirotronic.com)

*Marketing Office:*  
**Uniphos Envirotronic Pvt. Ltd**  
Readymoney Terrace, 167,  
Dr. Annie Besant Road, Worli,  
Mumbai 400 018, India.  
Tel. : +91(22) 6123 3500  
Fax : +91(22) 2493 8826/+91 (22) 2497 8119  
[www.kwikdrawtubes.com](http://www.kwikdrawtubes.com)