

## Information Data Sheet

**Detector Tube**      **HCN-2**  
**Part No. (US):**      **803945**  
**Part No.**              **D5085824**

### 1. Application

Detection of hydrogen cyanide (hydrocyanic acid gas, HCN) in air or in technical gases.

### 2. Detector Tube Sampling Pump

UNIPHOS 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

5 ppm ... 50 ppm hydrogen cyanide at n=2 (2 strokes)

2 ppm ... 12 ppm hydrogen cyanide at n=10 (10 strokes)

Any number of strokes from 3 to 10 can be chosen. For calculation use n=10 scale, relate as follows:

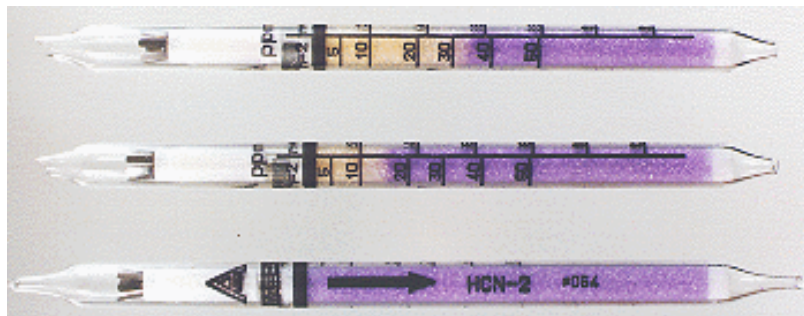
$$\text{ppm HCN} = \frac{10 \times \text{indication on } n=10 \text{ scale}}{\text{no. of strokes chosen}}$$

### 4. Chemical Reaction and Color Change

Reaction of hydrogen cyanide with mercury-(2)-chloride by which hydrogen chloride is formed.

Change of pH-value causes color change of an acid-base-indicator.

Color change:    blue            →    Yellow



### 5. Ambient Conditions During Sampling

Detector tubes can be used without compensation of the 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]).

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

## 6. Interferences and Cross Sensitivities

- a) No interference from:
- hydrogen, methane, ethane, propane, butanes, carbon monoxide.
  - carbon dioxide up to 15 vol.% (n=2) or 3 vol.% (n=10).
  - higher saturated hydrocarbons (e. g. hexanes, octanes), olefinic hydrocarbons (e. g. ethylene) aromatic hydrocarbons (e. g. benzene), halogenated hydrocarbons (e. g. trichloromethane, trichloroethylene), nitriles (e. g. acrylonitrile), carbon disulfide, acetic acid up to 1 vol.% (n=2) or 2000 ppm (n=10).
  - ammonia, sulfur dioxide up to 1000 ppm (n=2) or 200 ppm (n=10).
  - hydrogen sulfide, hydrogen chloride up to 300 ppm (n=2) or 60 ppm (n=10). Hydrogen sulfide discolors the protective layer from white to brown.
  - nitrogen dioxide up to 100 ppm (n=2) or 20 ppm (n=10).
- b) Free halogens (chlorine, bromine) are not indicated but will decrease stain length of hydrogen cyanide indication even when concentrations correspond to measuring range of detector tube.

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