

# Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

## Sulphur Dioxide SO<sub>2</sub>

TLV (TWA): 2 ppm

TLV (STEL): 5 ppm

## SSD-3

Flammable Range: -----

### Specification:

| Measurement Range               | Extended   | Standard    | Extended      |
|---------------------------------|--|-------------|---------------|
|                                 | 2.5 – 5  | 5 - 100 ppm | 100 - 200 ppm |
| No. of Pump Strokes             | 2 (200 mL)   | 1 (100 mL)  | 0.5 (50 mL)   |
| Volume Correction Factor (VCF)* | 0.5  | 1.0         | 2             |
| Sampling Time                   | 2.0 minutes per pump stroke (100 mL)   |             |               |
| Color Change                    | Blue → Yellow  |             |               |
| Shelf Life                      | 2 years  |             |               |
| Storage condition               | Below 10°C (50°F)  |             |               |
| Calibration condition           | Calibrated at 20°C (68°F) and 50% RH.  |             |               |
| Reaction Principle              | SO <sub>2</sub> + BaCl <sub>2</sub> + H <sub>2</sub> O → BaSO <sub>3</sub> + 2HCl<br>HCl + Base → Chloride |             |               |
| Relative standard deviation     | ± 10 – 15 %  |             |               |

\* Multiply the observed reading by the correction factor (VCF) to obtain the true concentration.

### Possible Interferences:

| Compound          | Concentration (ppm) | Interference | Colour change / Comments |
|-------------------|---------------------|--------------|--------------------------|
| Hydrogen sulphide |                     | +            | Beige colour             |
| Hydrogen fluoride |                     | +            | Ring                     |
| Nitrogen oxide    |                     | +            | Diffuse                  |
| Carbon monoxide   | 3000                | No           | No effect                |
| Ammonia           | 300                 | No           | No effect                |

### Correction for Environmental Parameters:

|                   |  |
|-------------------|--|
| Temperature       | Not necessary between 0 - 40°C (32 - 104°F). |
| Relative humidity | Not necessary between 10 - 90 %.             |



**Manufactured By:** Uniphos Envirotronic Pvt. Ltd.  
Nahuli (PO), Umbergaon (Tal.)  
Valsad (Dist), Gujarat, India – 396108

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