## **Uniphos Detector Tube Data Sheet**

Direct Reading Length of Stain Type

# **Diethyl Ether**

 $(C_2H_5)_2O$ 

SDE-6

TLV (STEL): ---TLV (TWA): 400 ppm Flammable Range: 1.9 - 36 %

## **Specification:**

| Management Dance                | Extended  | Standard   | Extended      |
|---------------------------------|---|------------|---------------|
| Measurement Range               | Do not extend   | 0.04 – 1 % | Do not extend |
| No. of Pump Strokes             |   | 1 (100 mL) |               |
| Volume Correction Factor (VCF)* |   | 1.0        |               |
| Sampling Time                   | 2.0 minute per pump stroke (100 mL)                   |            |               |
| Color Change                    | Yellow → Pale green                                   |            |               |
| Shelf Life                      | 2 years   |            |               |
| Storage condition               | Below 10°C (50°F)                                     |            |               |
| Calibration condition           | Calibrated at 20°C (68°F) and 50% RH.                 |            |               |
| Reaction Principle              | $(C_2H_5)_2O + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$ |            |               |
| Relative standard deviation     | ± 10 – 15 %   |            |               |

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

#### Possible Interferences:

| Compound              | Concentration (ppm) | Interference | Colour change /<br>Comments |
|-----------------------|---------------------|--------------|-----------------------------|
| Alcohols              |                     | +            | Pale green                  |
| Esters                |                     | +            | Pale green                  |
| Ketones               |                     | +            | Pale green                  |
| Aromatic Hydrocarbons |                     | +            | Pale green                  |
| Ethers                |                     | +            | Pale green                  |
| Furans                |                     | +            | Pale green                  |

## Other measurable compounds:

| Compound        | Correction<br>Factor | No. of pump<br>strokes | Measuring range |
|-----------------|----------------------|------------------------|-----------------|
| Isopropyl ether | 0.34                 | 3(300mL)               | 0.0136 – 0.34 % |

## **Correction for Environmental Parameters:**

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