

Uniphos Detector Tube Instruction Sheet

Direct Reading Length of Stain Type

Cyanide Ion

CN⁻

DCY- 2

MOST IMPORTANT:

Before using this product, carefully read this instruction sheet and strictly follow the recommended instructions.

INTRODUCTION:

The Uniphos Cyanide ion Detector tube provides a rapid, fully quantitative analysis of cyanide ion concentration in water.

The tube requires no pump because the inherent capillary action of water through the support material provides the driving force for the sample to rise.

SPECIFICATION:

| | |
|------------------------------|--|
| Measurement Range | 0.5 – 50 ppm |
| Sampling Time | 8 minutes |
| Color Change | Off White → Bluish green |
| Sample water pH Range | 4 - 12 |
| Storage condition | Below 10°C (50°F) |
| Calibration method | Sodium cyanide standard solution at 20°C |
| Active Reagent(s) | Cupric sulphate and o-toluidine |

MEASUREMENT PROCEDURE:

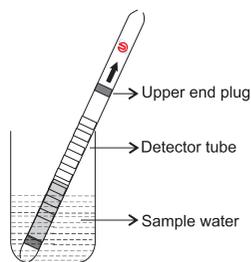


Fig -1

1. Take sample water into a clean beaker of approximately 100 ml capacity.
2. Break both ends of the tube using the ceramic tip breaker supplied with each box of tubes.
3. Immerse one end of the tube into the sample water so that the indicating 'arrow mark' points upwards (Fig-1). Due to the capillary action the sample water starts rising through the sensing reagent column. If the sample water contains the cyanide ion, the off white sensing reagent in the tube turns to bluish green color.
4. When the sample water rises upto the upper end plug remove the tube from the beaker and read the concentration at the interface of the stained to unstained reagent.

5. If stain exceeds the highest calibration mark dilute the sample with pure cyanide ion free water and re-test using a fresh tube. The true concentration is to be obtained by multiplying the tube reading by the dilution factor.
6. Check for possible cross-sensitivities.

NOTES:

If tailing occurs read at the midpoint of the taper. It is advisable to take the reading within a few minutes of sampling. If necessary mark the end of stain if it is to be read later.

CORRECTION FOR TEMPERATURE:

Temperature - Not necessary between 0 - 40°C (32 - 104°F).

POSSIBLE INTERFERENCES:

| Compound | Conc. (ppm) | Interference | Coexistence |
|-----------------|-------------|---------------------------|---------------------------|
| Carbonate ion | 1700 | No | Higher readings are given |
| Chloride ion | 100 | No | Higher readings are given |
| Sulphate ion | 2700 | No | Lower readings are given |
| Thiocyanate ion | 25 | Higher readings are given | Higher readings are given |
| Sulphide ion | 50 | No | Higher readings are given |

CAUTION:

1. The process of breaking the tube ends can generate flying glass bits and leave the tube with sharp edges. Use eye and hand protection while breaking the tube ends.
2. Keep tubes out of reach of unauthorized persons, especially children.
3. Dispose of used tubes according to local regulations.

IMPORTANT:

As we are continuously working on the improvement of products, we reserve the right to change the specifications without any prior notice.

USER RESPONSIBILITY:

It is entirely the responsibility of the user of the device to see that the device is operated, and maintained in strict accordance with the manufacturer's instructions provided with the device. It is also the sole responsibility of the user to ensure that the tubes are not used beyond their expiration date. The manufacturer and manufacturer's distributors are not otherwise liable for any incorrect measurement and its consequences or any damages resulting from user's negligence or otherwise.

Manufactured By: Uniphos Envirotronic Pvt. Ltd.(100% EOU)



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