

1. PERFORMANCE

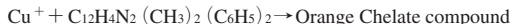
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|--------------------------|------------------------------------------------|
| 1) Sampling method | : Direct sampling method
(Refer to Page 17) |
| 2) Measuring range | : 1-100mg/ℓ |
| 3) Sampling time | : 1 to 2 minutes |
| 4) Sample volume | : over 5 mℓ |
| 5) Detectable limit | : 0.5mg/ℓ |
| 6) Shelf life | : 1 year |
| 7) Operating temperature | : 0 ~ 40 °C |
| 8) Operating PH | : 2-11 |
| 9) Reading | : Direct reading from the scale |
| 10) Colour change | : White → Orange |

2. RELATIVE STANDARD DEVIATION

RSD-low : 10% RSD-mid. : 5% RSD-high : 5%

3. CHEMICAL REACTION

By reacting with Hydroxylamine sulphate, divalent Copper ion is reduced to monovalent Copper ion. This monovalent Copper ion is reacted with 2, 9-Diphenyl 1-4, 7-Diphenyl 1-1, 10-phenanthroline and Chelate is produced.



4. CALIBRATION OF THE TUBE

CUPRIC SULPHATE STANDARD SOLUTION METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	mg/ℓ	Interference	mg/ℓ	Coexistence
Ferric ion	20	Similar stain is produced.	Copper ion conc. × 2	Higher readings are given.
Zinc ion		The accuracy of readings in not affected.	100	∕
Chlorine ion		∕		∕
Manganous ion		∕		∕

(NOTE)

6. SAMPLING METHOD

- Cut both ends of a fresh detector tube with a file.
- Squeeze the rubber bulb (an extra option), insert the tube end (B) into it as it is and immerse filled end (A) of the tube.
- Put the thumb off the rubber bulb, and the sample solution shall rise up.
- When the sample solution rises up to (C) of the tube, remove the tube from the rubber bulb and from the sample solution.
- The concentration can be obtained directly from the reading value of scale printed on the tube.
- When the concentration is over 100mg/ℓ, dilute the sample solution and multiply the readings obtained by the dilution ratio.

