



#### **INSTRUCTIONS**

# Copper

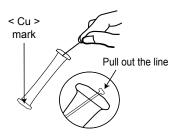
Model WAK-Cu

Bathocuproine color comparison Method

Main reagent: Bathocuproine

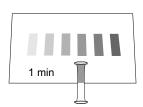
Range: 0.5 - ≥10 mg Cu/L (ppm)

#### How to use









- Remove the line to clear the aperture from the top of the tube.
- (2) Press the sides of the tube to expel approximately half of volume. Maintain pressed.
- (3) Immerse the tube in the sample. Release the sides to fill the tube up to the half. Shake the tube lightly 5-6 times.
- (4) After 1 minute, put the tube on the color chart as shown and compare with the standard colors.

#### How to read the test

After the reaction time, compare the color of the tube with the standard colors. The nearest color indicates the measured value of the sample. A color between two standard colors indicates a value between the two standard values.

# Care in handling of Pack Test before and after use

Keep PACK TEST out of the reach of children.

Keep PACK TEST in a cool, dry and dark place.

PACK TEST should be thrown with burnable garbage. Conform to the legislation of waste management.

Use a package as soon as possible after opening.

The PACK TEST tube must not be opened before and after use.

# First Aid Measures

Eye Contact  $\longrightarrow$  Immediately rinse eyes with water for at least 15 minutes. Consult a physician.

Ingestion — Drink a large glass of milk or water and vomit.

Skin contact --> Flush skin with water.

In case of doubt, consult a physician.



# PACK TEST Copper

## Features

The Copper PACK TEST is based on a bathocuproine color comparison method. The Copper PACK TEST is suitable for measurements of copper ions (Cu<sup>+</sup>, Cu<sup>2+</sup>) from various samples like industrial waste water, environmental water, etc.

# Cautions

- 1. The Copper PACK TEST allows to measure dissolved Cu<sup>+</sup> and Cu<sup>2+</sup> ion concentrations. If you wish to measure total copper fraction including suspended particles, you must process samples in order to dissolve solid phases.
- 2. The normal pH range is 2 10. If necessary, adjust the pH with diluted sulfuric acid or sodium hydroxide solution.
- 3. Ensure that PACK TEST tube is filled up to the half.
- 4. Partially undissolved reagent will not affect the measurement.
- 5. Keep sample temperature in the range 15°C 40°C. Lower temperature necessitates longer reaction time.
- 6. Read the test under a daylight type lamp.
- 7. Put the line back into the aperture after use to prevent reagent spilt.

## Interferences

Standard colors were determined from standard solutions. However, coexisting ions can modify reaction color. The list below reports ion concentrations under which ones interferences are insignificant:

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\leq 1000 mg/L : B³+, Ba²+, Ca²+, Cl⁻, F⁻, I⁻, K+, Mg²+, Mo⁶+, Na+, NH₄+, NO₂⁻, NO₃⁻, PO₄³⁻, SO₃²⁻, SO₄²⁻, Zn²+, Phenol, Residual chlorine, Surfactant \leq 500 mg/L : Mn²+ \leq 250 mg/L : Ni²+ \leq 100 mg/L : Al³+, Co²+, Cr³+ \leq 50 mg/L : Fe²+, Fe³+ \leq 20 mg/L : Cr⁶+ \leq 10 mg/L : Ag+ \leq 5 mg/L : CN⁻
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The Copper PACK TEST is suitable for sea water samples. Oxidant chemicals can interfere.