



KYORITSU

PACK TEST
ION SELECTIVE

INSTRUCTIONS

Ammonium

<Ammonium-Nitrogen>

Model WAK-NH₄

Harmful



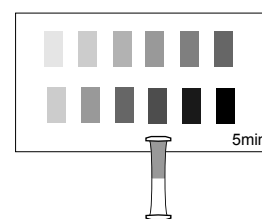
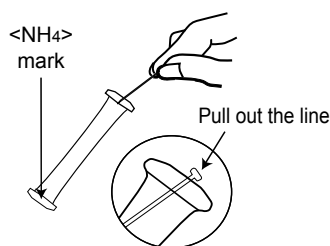
Corrosive

Indophenol Blue Color Comparison Method

Main reagents: Chlorinating reagent and Sodium Salicylate

Range: <Ammonium> 0.2 - 10 mg NH₄⁺/L (ppm)<Ammoniacal nitrogen> 0.2 - 10 mg NH₄⁺ - N/L (ppm)

How to use



- (1) 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 a few times.
- (4) After 5 minutes, 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. Both lines of standard colors must be used. A color between two standard colors indicates a value between the two standard values. According to your need, the ammoniacal nitrogen concentration can be determined on the back of the color chart.

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. This PACK TEST is very sensitive to humidity.

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

First Aid Measures

Contains a strong alkali. It is harmful and corrosive to eyes and skin.

Eye Contact → 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.

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PACK TEST Ammonium

Features

The Ammonium PACK TEST is based on an indophenol blue color comparison method with sodium salicylate. The Ammonium PACK TEST allows to measure the ammonium ion concentration from a sample containing relatively few coexisting substances, like river water, underground water or drinking water. A water sample containing a significant amount of Fe^{2+} , Fe^{3+} , NO_2^- ions, for example waste or industrial waters, could present yellowish or greenish hues. In this case, we recommend to use the Ammonium (High Range) PACK TEST WAK-NH₄(C). It is also possible to remove coexisting substances before measurement with the following apparatus.

Water Analysis Set: Ammonium (Low Range) (Model: WA-NH₄(L)).

Cautions

1. The ammonium PACK TEST allows to measure both ammonium ion (NH_4^+) and ammoniacal-nitrogen ($\text{NH}_4^+\text{-N}$).
2. The normal pH range is 5 -13. 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 20°C - 30°C. Lower temperature necessitates longer reaction time.
6. Read the test under a daylight type lamp.
7. If the sample does not contain ammonium, the color may become a light yellow.
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:

$\leq 1000 \text{ mg/L}$: Al^{3+} , Cl^- , K^+ , Mg^{2+} , Na^+ , NO_3^- , PO_4^{3-} , SO_4^{2-} , Zn^{2+} , Anion surfactant
$\leq 500 \text{ mg/L}$: Ca^{2+} , I^-
$\leq 200 \text{ mg/L}$: Residual Chlorine
$\leq 50 \text{ mg/L}$: Formaldehyde
$\leq 20 \text{ mg/L}$: Cu^{2+} , Cr^{3+} , Ni^{2+}
$\leq 5 \text{ mg/L}$: Cr^{6+} , NO_2^-
$\leq 2 \text{ mg/L}$: Mn^{2+}
$\leq 1 \text{ mg/L}$: Fe^{2+} , Fe^{3+}

The Ammonium PACK TEST is suitable for sea water samples.
Chloramine and Amphor amine interfere positively.