# visocolor® ECO

en

# Ammonium 3

**Test kit for performing colorimetric tests on ammonium ions in surface water and sewage**

**Method:**

Monochloramine is derived from ammonium ions as a result of the effect of chlorine in the alkaline range. Combined with thymol, this forms a blue indophenol dye.

**Measurement range:**

0.2 - 3 mg/l $NH_4^+$

**Contents of test kit (*refill pack):**

sufficient for 50 tests

| | | |
|---|---|---|
| 30 | ml | $NH_4$-1* |
| 2.5 | g | $NH_4$-2* |
| 6 | ml | $NH_4$-3* |
| 1 | | measuring spoon 70 mm* |
| 2 | | screw-plug measuring glasses |
| 1 | | slide comparator |
| 1 | | colour chart |
| 1 | | plastic syringe 5 ml |
| 1 | | instructions for use* |

**Hazard warning:**

$NH_4$-1 contains sodium hydroxide solution < 5%. **Causes burns.** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection. For further information, please ask for a safety data sheet.

**Instructions for use:**

*also refer to the pictogram on the back of the colour chart*

1. Pour a 5 ml water sample into each of the measuring glasses using the plastic syringe. Place a measuring glass on position A in the comparator.

**Only add the reagent to measuring glass B.**

2. Add **10 drops of $NH_4$-1**. Seal the glass and mix.
3. Add **1 level measuring spoonful of $NH_4$-2**, seal the glass and shake the mixture until the powder has dissolved. Wait for **5 min**.
4. Add **4 drops of $NH_4$-3**. Seal the glass and mix.
5. Open the glass after **7 min** and place it on position B in the comparator.
6. Slide the comparator until the colours match in the inspection hole on top. Check the measurement reading in the recess on the comparator reed. Mid-values can be estimated.
7. After use, rinse out both measuring glasses thoroughly and seal them.

The reagents can be used for the **photometric evaluation** with photometer PF-11.

This technique can also be used for analysing sea water after dilution (1+9).

**Disposing of the samples:**

The used analysis specimens can be flushed down the drain with tap water and channelled off to the local sewage treatment works.

**Interferences:**

Primary amines react in the same way as ammonium ions and produce higher results.

Depending on their concentration, substances which draw on the chlorine may reduce the measurement reading or suppress the reaction totally.

**Conversion table:**

| mg/l $NH_4^+$ | mg/l $NH_4$-N (ammonia nitrogen) |
|---|---|
| 0,2 | 0,16 |
| 0,3 | 0,23 |
| 0,5 | 0,39 |
| 0,7 | 0,54 |
| 1 | 0,78 |
| 2 | 1,6 |
| 3 | 2,3 |

**Storage:**

Store the test kit in a cool (< 25 °C) and dry place.

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