

visocolor® HE Ammonium

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High sensitivity test kit for the determination in the range of 0.02–0.50 mg/L NH_4^+

Method:

Indophenol blue

Contents of test kit (*refill pack):

sufficient for 110 tests

2 x 30 mL $\text{NH}_4\text{-1}^*$

16 g $\text{NH}_4\text{-2}^*$

1 black measuring spoon 85 mm*

1 plastic beaker for sampling

2 round glass tubes with screw caps

1 comparator block

1 color comparison disc Ammonium

Hazard warning:

$\text{NH}_4\text{-1}$ 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.

Procedure:

1. Place comparator block into the position provided in the box (see illustration).
2. Insert color comparison disc.
3. Open both round glass tubes, rinse several times with the water sample and fill up to the mark with the sample.
4. Add **10 drops $\text{NH}_4\text{-1}$** to the right glass tube, close and mix.
5. Add **1 level measuring spoon $\text{NH}_4\text{-2}$** to the right glass tube, close and mix. Wait **15 min.**
6. Reading: Turn color disc until both colors match by transmitted light from above. Read test results from the mark on the front side of the comparator. Intermediate values can be estimated.
7. After use clean both round glass tubes thoroughly and close.

The method cannot be applied for the analysis of sea water.

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:

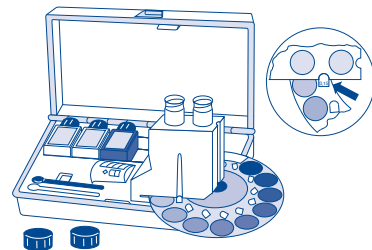
Primary amines react like ammonium ions giving higher results.

Chlorine-consuming reagents result in low ammonium values.

The temperature of the water sample should be between 18 and 30 °C. Especially low temperatures decrease the reaction rate considerably (low results).

Conversion table:

mg/L NH_4^+	mg/L $\text{NH}_4\text{-N}$ (ammonium-nitrogen)	mmol/m ³
0.02	0.016	1.1
0.04	0.03	2.2
0.07	0.05	3.9
0.10	0.08	5.5
0.15	0.12	8.3
0.20	0.16	11
0.30	0.23	17
0.40	0.31	22
0.50	0.39	28



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