

Hydrazine

Test kit for performing colorimetric tests on hydrazine in boiler water

Method:

Determination with 4-dimethylaminobenzaldehyde

Measurement range:

0,05–0,40 mg/L N₂H₄

Contents of test kit (*refill pack):

sufficient for 130 tests

- 30 mL N₂H₄-1*
- 27 mL N₂H₄-2*
- 2 screw-plug measuring glasses
- 1 slide comparator
- 1 colour chart
- 1 plastic syringe 5 mL
- 1 instructions for use*

Hazard warning:

N₂H₄-1 contains sulfuric acid 51–65 %.

H314 Causes severe skin burns and eye damage.

P260, P280, P303+361+353, P305+351+338, P310 Do not breathe dust/vapors. Wear protective gloves/eye protection. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. For further information ask for a safety data sheet.

Instructions for use:

also refer to the pictogram on the back of the color chart

1. Cool water sample to 20–25 °C if necessary. Turbid samples are to be filtered (membrane filter 0.45 µm, REF 91650).
2. 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.

3. Add **5 drops of N₂H₄-1**, seal the glass and mix.
4. Add **5 drops of N₂H₄-2**, seal the glass and mix.
5. Open the glass after **5 min** and place it on position B in the comparator.
6. Slide the comparator until the colors 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-12 / PF-12^{Plus}.

The method can be applied also 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:

Strictly observe the temperature and reaction time since they strongly influence the color intensity.

No interference will occur due to the presence of foreign matter (e.g. heavy metal ions, neutral salts, ammonia and phosphate ions), which may possibly be present in condensate, feed water or boiler water.

Storage:

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