

# Nickel

## Test kit for performing colorimetric tests on nickel ions in surface water and sewage

### Method:

In the presence of an oxidizing agent nickel ions react with dimethylglyoxime in an alkaline solution to form a reddish-brown complex.

### Measurement range:

0.1–1.5 mg/L Ni<sup>2+</sup>

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

sufficient for 150 tests

- 10 g Ni-1\*
- 2 x 20 mL Ni-2\*
- 1 measuring spoon 70 mm\*
- 2 screw-plug measuring glasses
- 1 slide comparator
- 1 color chart
- 1 plastic syringe 5 mL
- 1 instructions for use\*

### Hazard warning:

Information regarding safety can be found on the box' label and in the safety data sheet. You can download the SDS from [www.mn-net.com/SDS](http://www.mn-net.com/SDS).

### Instructions for use:

#### a) colorimetric determination with color chart

also refer to the pictogram on the back of the color 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 **1 measuring spoon of Ni-1**, seal the glass and dissolve by swirling.
3. Add **5 drops of Ni-2**, seal the glass and mix.
4. Open the glass after **1 min** and place it on position B in the comparator.
5. 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.
6. After use, rinse out both measuring glasses thoroughly and seal them.

#### b) photometric determination

The reagents are also suitable for **photometric evaluation**. Please refer to the separate instructions for photometric performance.

**ATTENTION:** The reaction time for the photometric determination is 3 minutes.

The method can be applied also for the analysis of sea water after dilution (1+9).

### Disposing of the samples:

Information regarding disposal can be found in the safety data sheet. You can download the SDS from [www.mn-net.com/SDS](http://www.mn-net.com/SDS).

### Interferences:

Complexed nickel is not detected by the measurement. It must be decomposed prior to determination.

The following ions do not interfere:  $\leq 1 \text{ mg/L Mn}^{2+}$   
 $\leq 5 \text{ mg/L Co}^{2+}, \text{Cu}^{2+}, \text{Fe}^{3+}$   
 $\leq 10 \text{ mg/L Cr}^{3+}, \text{Zn}^{2+}$

### Storage:

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