

# Manganese

High sensitivity test kit for the determination in the range of 0.03 – 0.50 mg/L Mn

## Method:

Complex of manganese with formaldoxime

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

sufficient for 100 tests

- 30 mL Manganese-1\*
- 28 mL Manganese-2\*
- 22 mL Manganese-3\*
- 1 plastic beaker for sampling
- 2 round glass tubes with screw caps
- 1 comparator block
- 1 color comparison disc Manganese

## 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).

## Procedure:

1. Insert color comparison disk (see illustration).
2. Open both round glass tubes, rinse several times with water sample and fill up to the mark with the sample.
3. Add 5 drops Mn-1 to the right glass tube, close and mix.
4. Add 5 drops Mn-2 to the right glass tube, close and mix. Wait 2 min.
5. Add 5 drops Mn-3 to the right glass tube, close and mix. Wait 5 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 (see illustration). Intermediate values can be estimated.
7. After use clean both round glass tubes thoroughly and close

mg/L Mn	mmol/m <sup>3</sup>
0.03	0.55
0.06	1.1
0.10	1.8
0.15	2.7
0.20	3.6
0.25	4.6
0.30	5.5
0.40	7.3
0.50	9.1

This method can not be applied for the analysis of sea water.

## 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:

Nickel ions interfere even in low concentrations (< 0.05 mg/L) by a yellow-green coloration.

Cobalt ions interfere even in low concentrations (< 0.1 mg/L) by a brown-yellow coloration.

Copper ions in excess of 10 mg/L interfere by a brown coloration.

Iron(II+III) ions in excess of 10 mg/L interfere by a red-brown coloration.

The temperature of the water sample should be between 15 and 25 °C.

