

Iron

High sensitivity test kit for the determination in the range of 0.01–0.20 mg/L Fe

Method:

Iron triazine complex

Contents of test kit (*refill pack):

sufficient for 300 tests

- 100 mL Fe-1*
- 2 x 23 g Fe-2*
- 1 measuring spoon 85 mm*
- 1 plastic beaker for sampling
- 2 round glass tubes with screw caps
- 1 comparator block
- 1 color comparison disc Iron

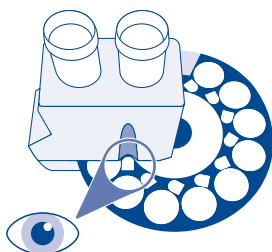
Hazard warning:

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.

Procedure:

1. Insert color comparison disc (see illustration).
2. Open both round glass tubes, rinse several times with the water sample and fill up to the mark with the sample.
3. Add 10 drops Fe-1 to the right glass tube, close and mix.
4. Add 1 level measuring spoon Fe-2 to the right glass tube, close and mix. Wait 3 min.
5. 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.
6. After use clean both round glass tubes thoroughly and close.
7. The iron(II) ion content is ascertained by carrying out the analysis without Fe-2.

mg/L Fe	mmol/m ³
0.01	0.18
0.02	0.36
0.03	0.54
0.04	0.72
0.05	0.90
0.07	1.25
0.10	1.8
0.15	2.7
0.20	3.6



This method cannot 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.

Interferences:

Copper ions > 0.3 mg/L form a grey-violet complex and thus interfere with the determination of iron.

Nickel ions > 0.5 mg/L lead to reduced findings.

Cobalt ions and molybdate ions > 0.5 mg/L disrupt the iron test by forming a yellow complex.

Nitrite ions > 20 mg/L interfere by producing a yellowish red color.

The temperature of the water sample should be between 15 and 30 °C; outside this range results can be too low.