

DEHA**Test kit for performing colorimetric tests on diethylhydroxylamine in boiler water****Method:**

Measurement of the reduction effect of oxygen scavengers, e.g. diethylhydroxylamine (DEHA), on iron(III) ions and detection of the resultant iron(II) ions.

Measurement range:

0.01 – 0.30 mg/L DEHA

Contents of test kit (*refill pack):

sufficient for 125 tests

- 30 mL DEHA-1*
- 25 mL DEHA-2*
- 2 screw-plug measuring glasses
- 1 slide comparator
- 1 color chart
- 1 plastic syringe 5 mL
- 1 instruction 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.

Procedure:**a) colorimetric determination with color chart**

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 4 drops of DEHA-1, seal the glass and mix.
4. Add 4 drops of DEHA-2, seal the glass and mix.
5. Open the glass after 10 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.

b) photometric determination

Requisite accessories: reaction tubes 16 mm OD (REF 91680)

Reaction time: 10'00 min

Sample	Blank value
<ol style="list-style-type: none"> 1. Rinse reaction tube 16 mm OD several times with sample and fill with 5 mL sample. 2. Add 4 drops DEHA-1, close and mix. 3. Add 4 drops DEHA-2, close and mix. 4. Measure. 	<ol style="list-style-type: none"> 1. Fill reaction tube 16 mm OD with 5 mL sample. 2. Measure Blank value

After use, rinse out both reaction tubes thoroughly and seal them.

The method can be applied also for the analysis of sea water.

Method	Measurement range
5241	0.005 – 0.500 mg/L diethylhydroxylamine (DEHA)
5242	0.01 – 0.60 mg/L carbohydrazide (carbo)
5243	0.01 – 1.00 mg/L hydroquinone (hydro)
5244	0.025 – 1.500 mg/L isoascorbic acid (ISA)
5245	0.015 – 1.000 mg/L methylethyl ketone oxime (MEKO)

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:

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

Iron(II) ions interfere. This interference can be taken into account when reading the value immediately after addition of reagent DEHA-2 and subtracting this value from the result.

Storage:

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