

Silica

Test kit for performing colorimetric tests on silica in surface water and sewage

Method:

Ammonium molybdate forms with silicates silicomolybdic acid, which is reduced to β -silicomolybdenum blue.

Measurement range:

0.2–3.0 mg/L SiO₂

Contents of test kit (*refill pack):

sufficient for 80 tests

- 25 mL SiO₂-1*
- 25 mL SiO₂-2*
- 25 mL SiO₂-3*
- 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.

Instructions for use:

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 **5 drops of SiO₂-1**, seal the glass and mix. Wait **3 min**.
3. Add **5 drops of SiO₂-2**, seal the glass and mix. Wait **1 min**.
4. Add **5 drops of SiO₂-3**, seal the glass and mix.
5. Open the glass after **15 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 also 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:

Information regarding disposal can be found in the safety data sheet. You can download the SDS from www.mn-net.com/SDS.

Interferences:

The following ions will not interfere: ≤ 150 mg/L PO₄³⁻

Conversion table:

mg/L SiO ₂	mg/L Si
0.2	0.1
0.4	0.2
0.6	0.3
1.0	0.5
1.5	0.7
2.0	0.9
2.5	1.2
3.0	1.4

Storage:

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