

# visicolor® ECO

## 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  $\beta$ -silicomolybdenum blue.

### Measurement range:

0.2–3.0 mg/L  $\text{SiO}_2$

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

sufficient for 80 tests

- 25 mL  $\text{SiO}_2$ -1\*
- 25 mL  $\text{SiO}_2$ -2\*
- 25 mL  $\text{SiO}_2$ -3\*
- 2 screw-plug measuring glasses
- 1 slide comparator
- 1 color chart
- 1 plastic syringe 5 mL
- 1 instruction for use\*

### Hazard warning:

$\text{SiO}_2$ -1 contains sulfuric acid 5–15 %,  $\text{SiO}_2$ -3 contains sodium disulfite 10–25 %.

H318 Causes serious eye damage.

P280, P305+351+338 Wear protective gloves/eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. For further information ask for a safety data sheet.

### 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  $\text{SiO}_2$ -1**, seal the glass and mix. Wait **3 min**.
3. Add **5 drops of  $\text{SiO}_2$ -2**, seal the glass and mix. Wait **1 min**.
4. Add **5 drops of  $\text{SiO}_2$ -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-11 / PF-12.

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

### Disposing of the samples:

The used analysis specimens can be flushed down the drain with tap water and channelled off to the local sewage treatment works.

### Interferences:

The following ions will not interfere:  $\leq 150$  mg/L  $\text{PO}_4^{3-}$

### Conversion table:

mg/L $\text{SiO}_2$	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.

#### Product data and ordering information

REF	931 033 (931 233)
Type	colorimetric test kit (refill pack)
Range	0 · 0.2 · 0.4 · 0.6 · 1.0 · 1.5 · 2.0 · 2.5 · 3.0 mg/L (ppm) $\text{SiO}_2$
Sufficient for	80 determinations
Shelf life	at least 3 years
Sea water suitability	yes
Detectable with PF-12	yes

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