

# Sulphide

**Test kit for performing colorimetric tests  
on sulphide ions in surface water and sewage**

**Method:**

Determination with *N,N*-dimethyl-1,4-phenylene diamine

**Measurement range:**

0.1 – 0.8 mg/l S<sup>2-</sup>

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

sufficient for 90 tests

5 g	S-1*
22 ml	S-2*
30 ml	S-3*
1	measuring spoon 70 mm*
2	screw-plug measuring glasses
1	slide comparator
1	colour chart
1	plastic syringe 5 ml
1	instructions for use*

**Hazard warning:**

S-2 contains sulphuric acid 50%. **Causes severe burns.** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. For further information, please ask for a safety data sheet.

**Instructions for use:**

*also refer to the pictogram on the back of the colour 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 **1 level measuring spoon of S-1**, seal the glass and shake briefly. Wait **1 min**.
3. Add **5 drops of S-2. Do not mix!**
4. Add **5 drops of S-3**, 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 colours match in the inspection hole on top. Check the measurement reading in the recess on the comparator reed (mg/l S<sup>2-</sup>  $\triangleq$  mg/l H<sub>2</sub>S). Mid-values can be estimated.
7. After use, rinse out both measuring glasses thoroughly and seal them.

The reagents can be used for the **photometric evaluation** with photometer PF-11.

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:**

Sulphides are determined, which are dissolved or soluble in sulphuric acid.

Sulphide concentration is tested in an acidic medium and, therefore, if the reagents are not mixed gently, some sulphide may escape as hydrogen sulphide, leading to lower test results.

The following ions will not interfere:

$\leq 5$  mg/l NO<sub>2</sub><sup>-</sup>, SCN<sup>-</sup>

**Storage:**

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