LCW053 Sulfide

DOC312.53.94387

0.1–2.0 mg/L S^{2-} LCW053

Scope and application: For waste water.

Test preparation

Test storage

Storage temperature: 15–25 °C (59–77 °F)

pH/Temperature

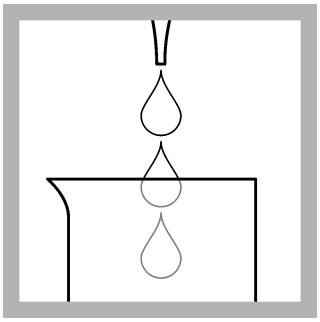
The pH of the water sample must be between pH 3–10.

The temperature of the water sample and reagents must be between 15–25 °C (59–77 °F).

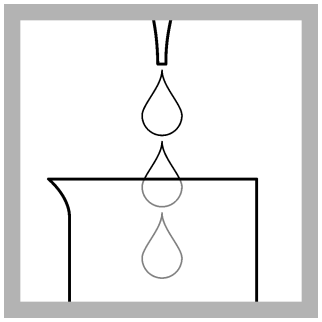
Before starting

The analysis must be carried out **immediately** after the sample has been taken.
Review safety information and expiration date on the package.
Review the Safety Data Sheets (MSDS/SDS) for the chemicals that are used. Use the recommended personal protective equipment.
Dispose of reacted solutions according to local, state and federal regulations. Refer to the Safety Data Sheets for disposal information for unused reagents. Refer to the environmental, health and safety staff for your facility and/or local regulatory agencies for further disposal information.

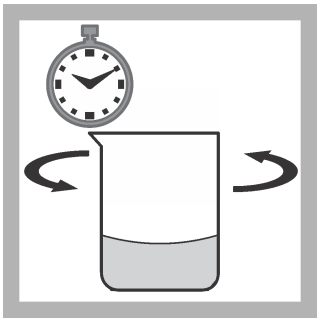
Procedure



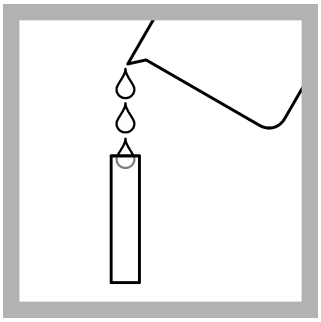
1. A—Sample:
Pipet into a beaker:
50.0 mL sample,
10.0 mL solution A and
0.5 mL solution B.



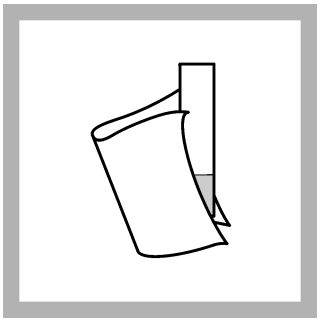
2. B—Blank-value:
Pipet into a beaker:
50.0 mL distilled water,
10.0 mL solution A and
0.5 mL solution B.



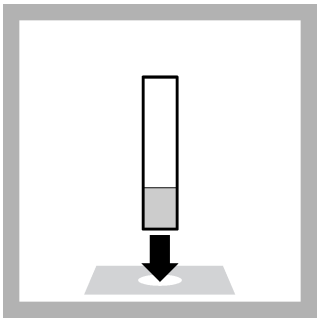
3. Mix A and **mix B** and allow to stand for **10 minutes**.



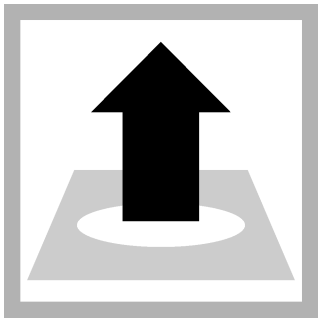
4. Transfer to **10 mm rectangular cuvettes**.



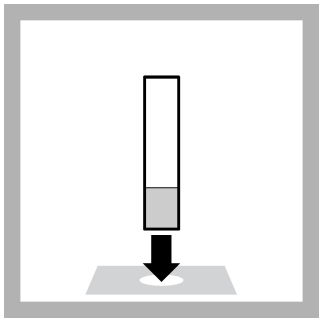
5. Thoroughly clean the outside of the cuvettes and evaluate.



6. Insert the blank-cuvette into the cell holder.
Go to **Stored Programs**.
Select the test: push **ZERO**.



7. Remove the blank-cuvette.



8. Insert the sample cuvette into the cell holder.
Push **READ**.

Interferences

The ions listed in the table have been individually checked up to the given concentrations and do not cause interference.

This list of interferences has been taken from DIN 38 405 D 26 p. 1.

The measurement results must be subjected to plausibility checks (dilute and/or spike the sample).

Interference level	Interfering substance
900 mg/L	$S_2O_3^{2-}$, SCN^-
700 mg/L	SO_3^{2-}
20 mg/L	J^-
2 mg/L	CN^-

Summary of method

Dimethyl-p-phenylenediamine reacts with hydrogen sulphide to form an intermediate compound which turns into leucomethylene blue.

The leucomethylene blue is oxidized to methylene blue by iron(III) ions.

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