

# QUANTOFIX® Arsenic Sensitive

## Method:

Detection of anorganic arsenic(III) and arsenic(V) compounds in water samples results from adding zinc powder and a solid acid. Liberated arsenic hydride reacts with mercury(II)bromide contained in the test field to form yellow through brown arsenic-mercury halogenides. An oxidizing agent is also added for the elimination of interfering sulfide ions (false positive results).

## Content:

1 aluminum container with 100 test strips	2 reaction vessels incl. screw cap
1 bottle of As-I	2 colored measuring spoons
1 bottle of As-II	1 color scale
1 bottle of As-III	1 waste bag for used test strips

## Precautions:

Each test field on the test strips contains mercury(II)bromide. Toxic in contact with skin. As-II contains sulfamic acid: Causes skin irritation. Causes serious eye irritation. Harmful to aquatic life with long lasting effects. Wear protective gloves/eye protection. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. As-III contains zinc powder: Very toxic to aquatic life with long lasting effects. Avoid release into the environment.

## General indications:

Remove only as many test strips as are required. Close the container immediately after removing the strips. **Do not touch the test field.** Dispose of used test strips in a dustbin liner and eliminate according to local environmental regulations.

## Instructions for use:

- Fill reaction vessel up to the label (100 mL) with the sample solution
- Add 2 drops of As-I
- Shake gently for 2 seconds
- Carefully open As-II bottle and add 1 level spoon (white!)
- Shake gently for 2 seconds
- Carefully open As-III bottle and add 1 level spoon (red!)
- Shake gently for 2 seconds
- Close reaction vessel with screw cap
- Raise the opening in the screw cap
- Insert the test strip through the opening into the reaction vessel
- The test pad must show in the same direction as the green circle on the opening
- Completely close the opening, so that 2 cm of test strip stick out from the opening
- Wait 15 minutes
- Raise the opening and take out the test strips
- Dip test strip into water for 2 seconds
- Shake off excess liquid
- Compare test strip to color scale

Dispose of the solution down the sink with plenty of water immediately after carrying out the test, and rinse the reaction vessel with plenty of water. Remove any residues with a brush or diluted hydrochloric acid and rinse again with a plenty of water. A new test can then be carried out.

## Interferences:

The following ions interfere with the determination only when the concentrations below are exceeded:

1000 mg/L: Ca<sup>2+</sup>, K<sup>+</sup>, Mg<sup>2+</sup>, Na<sup>+</sup>, Zn<sup>2+</sup>, Cl<sup>-</sup>, CN<sup>-</sup>, CO<sub>3</sub><sup>2-</sup>, SO<sub>4</sub><sup>2-</sup>, EDTA; 500 mg/L: Fe<sup>2+</sup>, Fe<sup>3+</sup>, F<sup>-</sup>; 100 mg/L: Al<sup>3+</sup>, Sn<sup>2+</sup>, CrO<sub>4</sub><sup>2-</sup>, NO<sub>2</sub><sup>-</sup>, NO<sub>3</sub><sup>-</sup>, PO<sub>4</sub><sup>3-</sup>; 25 mg/L: ClO<sub>3</sub><sup>-</sup>; 5 mg/L: Co<sup>2+</sup>; 2 mg/L: S<sup>2-</sup>, SO<sub>3</sub><sup>2-</sup>; 1 mg/L: Ni<sup>2+</sup>, Sb<sup>3+</sup>, SeO<sub>3</sub><sup>2-</sup>, S<sub>2</sub>O<sub>3</sub><sup>2-</sup>; 0,5 mg/L: Ag<sup>+</sup>, Cu<sup>2+</sup>.

## Storage:









Avoid exposing the strips to sunlight and moisture. Keep container cool and dry (storage temperature between 4 °C and 35 °C). If correctly stored, the test strips may be used until the use-by-date printed on the packaging.

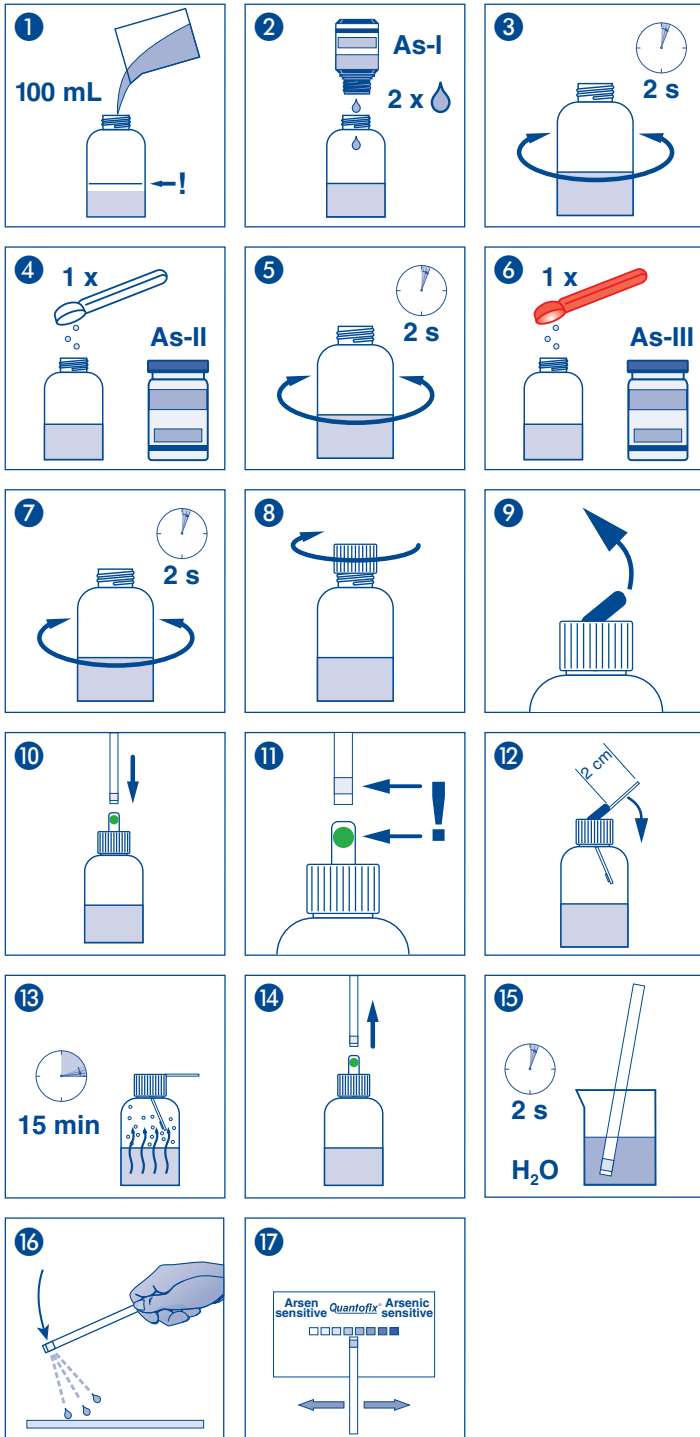
## Additional information:

The test strip container stopper contains a non-toxic drying agent. If swallowed, drink plenty of water.

Revised: 2017-05

## Explanation of symbols

	Use by		Lot number
	Catalog number		Package content
	Keep container closed		Protect from humidity
	Storage temperature		Observe the safety precautions in instructions



**WARNING:** Hydrogen and arsine are liberated during the test. Use only in well-ventilated areas and keep away from ignition sources.