

Lovibond® Water Testing

Tintometer® Group

Quantity of Tests: 100

Working Range: 0- 0.5 ppm

Measuring Range: 0, 0.005, 0.01, 0.05, 0.1, 0.25, 0.5 ppm as As^{3+/5+}

1. Method

When zinc powder, a solid acid are added to compounds of arsenic(III) and arsenic(V), arsenic hydride is liberated, which in turn reacts with mercury(II) bromide contained in the reaction zone of the analytical test strip to form yellow-brown mixed arsenic-mercury halogenides. The concentration of arsenic (III) and arsenic (V) are measured semi-quantitatively by visual comparison of the reaction zone of the analytical test strip with the fields of a colour scale.

2. Applications

Drinking water, mineral water, groundwater, waste water and surface water

3. Preparation

Samples containing more than 0.5 mg/l As^{3+/5+} must be diluted with distilled water

INSTRUCTION GUIDE

Arsenic Field Test Kit- Test Strip Method

Part Code: IN400701



4. Procedure

Take 50ml water sample in the provided reaction bottle

Add 1 drop of Arsenic FTK Reagent A. Mix well

Add 1 leveled Green measuring spoon (0.01g) of Arsenic FTK Reagent B and mix well

Add 1 leveled Blue measuring spoon (1g) of Arsenic FTK Reagent 1 to it and mix to dissolve

Add 4 drops of Arsenic FTK Reagent C and mix well.

Add 1 leveled Yellow measuring spoon (0.3g) of Arsenic FTK Reagent 2 to it and mix to dissolve

Add 6 drops of Arsenic FTK Reagent 3 and mix well.

Wait for 5 mins

During this waiting time of 5 mins, Press to flip up the screw cap of the reaction bottle, to insert the analytical test strip into the opening of the screw cap from the inner bottom part of the cap (do not insert the strip from the top of the flipped cap). Ensure that the horizontal line mark on strip is facing you and insert exactly till the insertion mark (horizontal line) then press to flip down. Keep this aside.

After 5 mins is completed, Add 1 leveled Red measuring spoon (1g) of Arsenic FTK Reagent 4 to the reaction bottle and immediately put the screw cap on to the reaction bottle

Avoid any contact between the test strip and the sample solution!

Leave to stand for 20 mins

After 20 mins, Remove the analytical test strip from the screw cap of the reaction bottle, leave it for 5 secs to dry, then add a drop of water onto the coloured reaction zone and shake off excess liquid.

Match the colour of the reaction zone developed on the test strip with the colour card provided with the kit.

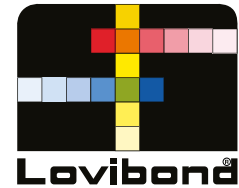
Read off the corresponding concentration value in mg/l As^{3+/5+}. If an exact colour match cannot be achieved, estimate an intermediate value.

For more information please reach out to us:

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Reagents and auxiliaries

The analytical test strips are stable up to the date stated on the pack when stored in the closed tube at +15 to +35 °C.

Package contents

Pack of 100 analytical test strips
1 reaction bottle with screw cap
1 bottle of Arsenic FTK Reagent 1
1 bottle of Arsenic FTK Reagent 2
1 bottle of Arsenic FTK Reagent 3
1 bottle of Arsenic FTK Reagent 4
1 bottle of Arsenic FTK Reagent A
1 bottle of Arsenic FTK Reagent B
1 bottle of Arsenic FTK Reagent C
4 Measuring Spoons (Red, Green, Yellow & Blue)
1 colour card
1 instruction manual

Notes on the measurement

- The colour of the reaction zone may continue to change after the specified reaction time has elapsed. This must not be considered in the measurement.
- If the colour of the reaction zone is equal to or more intense than the darkest colour on the scale, repeat the measurement using fresh, diluted samples until a value of less than 0.5 mg/l As^{3+/5+} is obtained. This must then be multiplied by the corresponding dilution factor.
- Reclose the reagent bottles and the tube containing the test strips immediately after use