BACTOSCOPE
(H₂S Strip Bacteriological Field Test Kit for Checking Drinking Water Quality)

This Test Kit is meant for checking microbiological quality of water. Water borne diseases like typhoid, cholera, diarrhoea and jaundice are caused by polluted water supply. The conventional method of testing of microbiological quality of drinking water comprises of enumeration of most probable number (MPN) of *coliforms* present in the water. This needs services of qualified microbiologist, laboratory facility and takes 72 hrs to know the result. With help of BACTOSCOPE Kit even a layman can check the Bacteriological quality of drinking water. The test can be carried out in the field itself by the user. The test result is available within 18 – 48 hrs.

The Test Kit is based on the technical know-how from DRDE, Govt. of India (our sister concern ABHIJIT ENTERPRISES, Pune is an authorized technical know-how licensee of DRDE, Govt. of India)

The presence of *coliforms* in drinking water is consistently associated with organisms that produce Hydrogen sulphide (H₂S). Further, enteric bacteria such as *Salmonella, Proteus, Citrobacter* and some strains of *Klebsiella* also produce H₂S. This communication has been effectively used in this Kit for detection of faecal pollution in water.

**METHOD OF TESTING WATER :**

Dry and sterile media are provided in the screw-capped bottles, which are ready for use. Fill the water to be tested in bottle up to the mark and cap it. Shake the bottle gently after 5 minutes. Keep the bottle at temperature of 30 to 35 deg. C and during cold weather, in the incubator at 37 deg. C for 24 to 48 hrs. If none of these are available, the bottle can be kept in the pocket while sleeping at night. Observe for following changes in the bottle after the specified time.

1. No Change in colour of water in the bottle → Water is fit for drinking.
2. Water in the bottle turns jet black → Water is unfit for drinking.

**Advantages of the Test:**

- It is a field test.
- No Laboratory set-up required. No technical expertise required.
- Rapid.
- Economical.