

HOW TO USE THE WATER TESTS

1. Using the syringe provided, **draw up 10ml** of the water that is to be tested.
2. Carefully remove the lid from the tube and making sure no powder is spilled from the tube, **dispense** the 10ml from the syringe into the tube. Replace the cap and make sure it is tight.
3. **IMPORTANT** - under **no circumstances** must the tube be reopened after the sample has been added.
4. Using one of the incubator options provided by Praecautio, **incubate** the tube for **24 hours**.
5. A positive result for **E.coli** is indicated by the liquid in the tube turning **green** (see “Interpreting the results” below). A **yellow** colour indicates the presence of **coliforms**. A **clear** colour is a **negative** result. Although the result is obtained in 24 hours, to make sure, always incubate negative results for an additional 24 hours.

INTERPRETING THE RESULTS

1. **Presence / Absence** result
 - A **green** colour indicates the presence of **E.coli** in the water.
 - A **yellow** colour indicates the presence of **coliforms** in the water.
 - No change / **clear** indicates the **absence** of both E.coli and coliforms.



Left: positive E.coli
Right: Positive coliforms

2. **Semi-quantitative** result for E.coli

- The **faster** the colour changes to green, the **higher** the number of E.coli in the water.
- The **table** below can be used to determine a rough quantitative result based on the hours it has taken for the test to indicate positive. For example if the test takes 19 hours to reach the positive green colour, it is an indication of between 1 and 10 E.coli per ml of water. If the positive green colour is reached by 15 hours, the result would be between 100 and 1000 E.coli per ml.

Count cfu/ml	hours
0,1-1	24
1-10	19
10-100	16
100-1000	14
1k-10k	13
10k-100k	9
100k-1m	9
>1m	8

3. **Potable** (to be used for drinking) water, should have **no E.coli**. Therefore, if the liquid in the tube turns green, this water should not be used for drinking unless it is treated first.
4. A **small number of coliforms** (less than 10 per ml) are allowed in potable water. So the yellow colour is not as serious as a green colour change.
5. The **best result** for potable water is a **clear** tube - which means no coliforms or E.coli.

DISPOSING OF THE TESTS

The tests, once used are to be considered as **biohazards**. They must therefore be disposed of by **acceptable procedures** for disposal of biohazard waste.

For **South African** users - there are two options:

1. If you have access to an **accredited biohazard disposal company**, then the tests can be included in that waste.
2. **Contact Praecautio** who have an additional service to **arrange safe disposal** of used tests.

For **international** users:

1. Dispose the used tests according to the **accepted procedures in your country**.