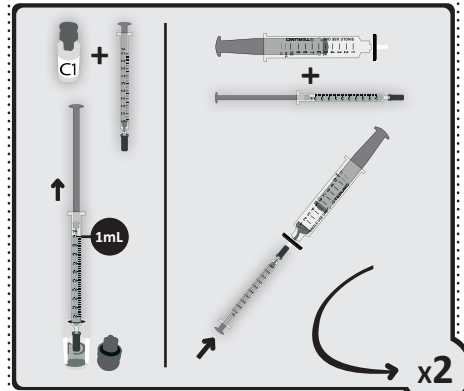


COLIFORMS Water Test

TEST REFILL

the 10mL-syringe/filter assembly with the "TERUMO" marking by fitting the small syringe, which is equipped with a connector, onto the tip of the filter, then pushing the piston.

- Repeat to transfer the entire contents of vial C1.



- Remove the small 1mL syringe

VIDEO OF THE PROTOCOL ONLINE!

<https://cwt.c4hydro.com/instructions>



Thank you for choosing the Coliforms Water Test by C4Hydro.

The Coliforms Water Test has been devised to specifically detect coliforms bacteria (including *Escherichia coli*). The presence of these bacteria is a sign of fecal contamination in your water. In case of ingestion, or contact of this contaminated water with the mucous membranes while swimming, severe infections can occur (food poisoning, acute gastroenteritis, meningitis, urinary tract infection, or even sepsis).

This test is based on the culturing of bacteria, which is the same method as that used by professional laboratories to detect coliforms.

The scientific method used by this test has been redesigned and adapted for domestic use to allow an individual to test his/her water.

The method used by this C4Hydro test provides a result in 24 hours.

IMPORTANT: THINGS TO KNOW BEFORE GETTING STARTED

- The C4Hydro Mini-Lab is required in addition to the Coliforms Water Test in order to test your water.
- The test takes place in two steps with 24h of waiting time between each step.
- Only start this test if you are available 24h later to terminate it.

Please read the entire leaflet.



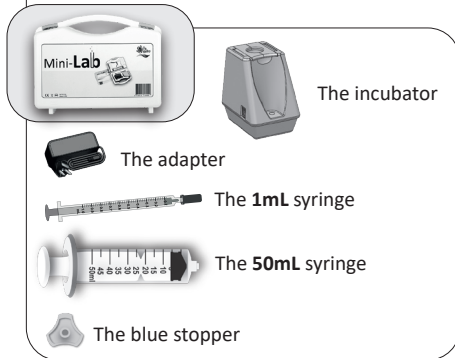
CONTENTS OF THE COLIFORMS WATER TEST:

- 1 vial C1
- 1 filter
- 1 ampoule of sterile water
- 1 "TERUMO" syringe (10mL)

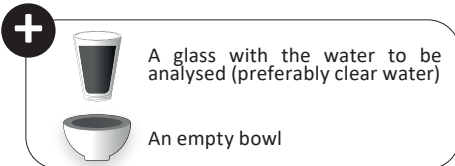
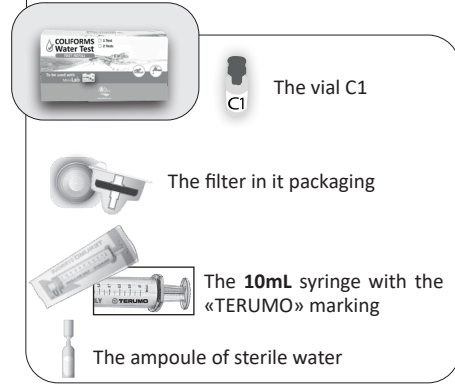
If you do not have Internet access, please carefully follow the present instructions:

Day 1 Required equipment

In the Mini-Lab:

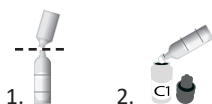


In the Coliforms Water Test:



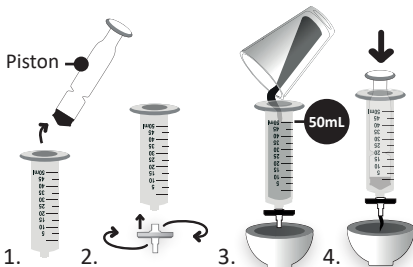
1. PREPARATION OF THE CULTURE MEDIUM

- Prepare the equipment mentioned above.
- Plug in the incubator. **It will have to remain plugged in for at least 24h without interruption.**
- Pour the contents of the ampoule of sterile water into vial C1, then recap it and set the vial aside.



2. FILTRATION OF THE WATER SAMPLE

- Take the 50mL syringe, remove its piston and screw the filter onto the end of the syringe.



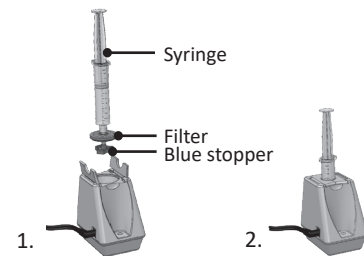
- Above the empty bowl, pour 50mL of the water to be analysed into the 50mL syringe, then put the piston back in place.
- Empty the syringe into the empty bowl in the following manner: push the piston until there is no more liquid coming out of the syringe (the resistance is normal).

3. EXPOSURE TO THE CULTURE MEDIUM

- Remove the 10mL syringe with the «TERUMO» marking from its packet and fill it with air up to the graduation 5.
- Unscrew the filter from the large 50mL syringe and screw it onto the syringe 10mL with the «TERUMO» marking. **The filter will remain on the 10mL syringe until the end of the analysis.**
- If the contents of vial C1 have not dissolved, turn the bottle once.
- Transfer the entire contents of vial C1 into the 10mL-syringe/filter assembly with the «TERUMO» marking in the following manner:
 - Sample the liquid from vial C1 with the small 1mL syringe and transfer the liquid into

4. INCUBATION

- Take the blue stopper and fit it onto the end of the filter.
- Arrange the 10mL-syringe/filter assembly with the "TERUMO" marking in the incubator in the following manner:
 - Open the flaps on the upper part of the incubator.
 - Insert the syringe into the incubator with its filter at the bottom, and then close the flaps.



- The light on the incubator must be green and constant. Otherwise, refer to the equipment leaflet in the Mini-Lab.
- The incubation period must last for 24h.
- Set an alarm on your phone for 24h in order to complete the test and respect the incubation time frame.

5. EQUIPMENT CLEANING

- Rinse the 1mL syringe in the following manner:
 - Fully fill it with tap water and eject it into the bowl. Repeat this procedure 3 times.
- Store the 1mL and 50mL syringes in the Mini-Lab.
- Dispose of vial C1, the used ampoule of sterile water and the content of your bowl.

6. DATE & TIME END-OF-INCUBATION

Indicate here below the end date and time of incubation (24h):

On: / / at: :

End of the protocol. Wait for 24h to interpret the result.

INCUBATION

Time off

You don't have to do anything. Under no circumstances should the incubator be unplugged.

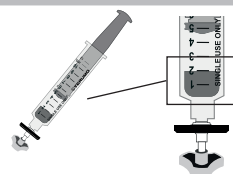
During this stage, and thanks to the incubator provided with your Mini-Lab, the bacteria present in the filter will be placed in a medium (nutrients and temperature) conducive to their development.

Day 2 Reading the result

During this last stage, you will just need to check the colour of the solution in your syringe. A yellow coloration indicates that your sample contained coliforms bacteria.

RESULT OF YOUR ANALYSIS

- Retrieve the 10mL syringe/filter assembly with the «TERUMO» marking from the incubator.
- Check the colour of the liquid contained in the «TERUMO» 10mL syringe/filter assembly.
 1. If the liquid is transparent, the result is negative.
 2. If the liquid is yellow (even slightly), the test is positive for coliforms (including *E. coli*), indicating that the water tested has been contaminated with faecal matter.



STORAGE OF THE EQUIPMENT

Store your equipment as follows:

- Place the blue stopper in the Mini-Lab.
- Unplug the incubator and leave it to cool before storing it.
- Check that all the components of the Mini-Lab are in the case for use in the next analysis.
- Dispose of the remaining components (including the 10mL syringe/filter assembly with the "TERUMO" marking).

CONDITIONS FOR CARRYING OUT THE TEST

- Ambient temperature between 15°C and 30°C (59 - 86°F)
- Humidity level <= 80%

STORAGE

Store the test between 15°C and 30°C (59-86°F) away from humidity, light and heat. Do not store in a refrigerator. The Coliforms Water Test must be used before the expiry date stated on the packaging.

SAFETY NOTICE

DO NOT INGEST.
KEEP OUT OF REACH OF CHILDREN.

Do not eat, drink or smoke in areas in which the reagent is handled.

If the reagent comes into contact with the skin, rinse immediately with water.

If the reagent gets into an eye, rinse immediately with the eyelid open for a sufficient time.

If you inhale the reagent, breathe fresh air.

If the respiratory paths become irritated, consult a doctor.

If the reagent is ingested, do not induce vomiting, rinse the mouth abundantly and with a large volume and consult a doctor.

Once the test is terminated, dispose of the vial C1, together with its lid and the "TERUMO" syringe, in a bin. Wash your hands with soap and hot water.

COLIFORMS Water Test

TEST REFILL



To be used with
Mini-Lab



FREQUENTLY ASKED QUESTIONS

What are coliforms bacteria?

Coliforms (including *Escherichia coli* or *E. coli*) are indicators of faecal contamination. They indicate the presence of potentially pathogenic bacteria. Coliforms naturally develop in the digestive tract of warm-blooded animals.

In case of poor hygiene measures, they can be found in certain food products and in drinking or bathing water. A contaminated water, ingested or in contact with mucous membranes, can cause food poisoning, acute gastroenteritis,

bloody diarrhoea, meningitis, urinary tract infections, and sepsis, a generalized infection fatal in 27-50% of cases. In infants, this can cause hemolytic uremic syndrome (HUS), a severe toxic shock that affects the kidneys and can result in acute renal failure.

What types of coliforms are detected by the Coliforms Water Test?

The C4Hydro Coliforms Water Test detects all coliforms bacteria (including *E. coli*) from 1CFU/mL (colony-forming unit per milliliter of water in your water sample).

Why test for the presence of coliforms?

If your water contains coliforms bacteria, it means it is contaminated with faecal matter. It is unsuitable for drinking and dangerous to your health.

What does the result mean?

If the result is positive (yellow coloration of the solution), this indicates a coliforms concentration higher than 1CFU/mL. This is a high risk to your health.

What should I do if my test is positive?

If the result indicates a bacterial contamination (yellow coloration of the solution), your sample contains a concentration of bacteria which represents a risk to your health. A treatment by biocide injection is recommended in order to eliminate the presence of coliforms (and other pathogens associated with faecal contamination) in your water.

Contact your water manager (property manager, maintenance contract agent) or a water treatment professional immediately.

For more information on the product:

<https://shop.c4hydro.com>

support@c4hydro.com

C4Hydro
Grand Luminy Technopole
Zone Luminy Entreprise Biotech
Case 922, 163 Avenue de Luminy
13288 Marseille Cedex 09
France



VIDEO

OF THE PROTOCOL ONLINE!

<https://cwt.c4hydro.com/instructions>