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# **CBSA**life Water Examination Kit

for Detection of Coliforms and *E. coli* O157



CMS163

## **Introduction**

CBSAlife Water Examination kit simultaneously detects total coliforms and *E. coli* O157 in water. It is based on CBSAlife ColiNutrient's proprietary. When total coliforms metabolize CBSAlife ColiNutrient indicator, ONPG, the sample turns yellow. When *E. coli* O157 metabolize CBSAlife ColiNutrient indicator, MUG, the sample also fluoresces. CBSAlife Water Examination kit can simultaneously detect these bacteria at 1 cfu/100 mL within 24 hours even with as many as 2 million heterotrophic bacteria per 100 mL present.

## **Kit Content:**

CBSAlife ColiNutrient vial

## **Material and Equipment to be supplied by user:**

- Sterile, transparent, non-fluorescing vessel
- Disposable gloves
- Shaker
- Incubator

## **Shipping and Storage:**

CBSAlife Water Examination Kit should be kept at cold condition at  $-20^{\circ}\text{C}$ . Storage at higher temperatures should be avoided. CBSAlife ColiNutrient vial should be stored tightly sealed at dark condition. Under these conditions, CBSAlife Water Examination Kit should remain stable until the expiration date on the vials, without showing any reduction in performance.

## **Precautions and Disclaimers:**

This kit is intended for research purposes and for microbiological applications. It is not designed for human or diagnostic, prevention, or treatment of a disease use. Ensure that a suitable lab coat, disposable gloves and protective goggles are worn when working with chemicals.

If liquid containing CBSAlife Colinutrient is spilt, clean with a suitable laboratory detergent and water. If the spilt liquid contains potentially infectious agents, clean the affected area first with laboratory detergent and water, and then with 1% (v/v) sodium hypochlorite.

## Procedure:

- 1) Add contents of one vial into a 100 mL sample in a sterile, transparent, non-fluorescing vessel.
- 2) Cap vessel and shake at 150 rpm for 1-2 min.
- 3) Incubate at  $35\pm 0.5^{\circ}\text{C}$  for 24 hours.
- 4) Read results according to Result Interpretation table below.

## Result Interpretation table

Appearance	Result
Less yellow than the comparator	Negative for total coliforms and <i>E. coli</i>
Yellow equal to or greater than the comparator	Positive for total coliforms
Yellow and fluorescence equal to or greater than the comparator	Positive for <i>E. coli</i>

## Interpretation Notes

- Look for fluorescence with a 6-watt, 365-nm UV light within 5 inches of the sample in a dark environment. Face light away from your eyes and towards the sample.
- CBSAlife Water Examination kit results are to be read after 24 hours of incubation. However, if the results are ambiguous to the analyst based on the initial reading, incubate up to an additional four hours (but not to exceed 28 hours total) to allow the color and/or fluorescence to intensify.
- Positives for both total coliforms and *E. coli* O157 observed before 24 hours and negatives observed after 28 hours are also valid.
- In addition, laboratories may incubate samples for additional time (up to 28 hours total) for their convenience.

## Procedural Notes

- This insert may not reflect your local regulations. For compliance testing, be sure to follow appropriate regulatory procedures.

For example, samples run in other countries are incubated at  $36\pm 2^{\circ}\text{C}$  for 24–28 hours.

- CBSAlife Water Examination kit can be run in any multiple tube format. Standard Methods for the Examination of Water and Wastewater MPN tables should be used to find MPNs.
- If sample dilutions are made, multiply the MPN value by the dilution factor to obtain the proper quantitative result.
- Use only sterile, nonbuffered, oxidant-free water for dilutions.
- CBSAlife Water Examination kit is a primary water test. The performance characteristics do not apply to samples altered by any pre-enrichment or concentration.
- In samples with excessive chlorine, a blue flash may be seen when adding CBSAlife ColiNutrient.

If this is seen, consider sample invalid and discontinue testing.

- Aseptic technique should always be followed when using CBSAlife ColiNutrient. Dispose of in accordance with Good Laboratory Practices.

**CBSA***life*

155-196 Innovation Drive, Winnipeg, MB, R3T 2N2, Canada

Phone: +1 (204) 269-2255

Email: [info@cbsalife.com](mailto:info@cbsalife.com)

Website: <https://cbsalife.com>

