

## Summary of the Basic Technology and Test Procedure

### Colitag™ Presence/Absence (P/A) Water Test Kit for Total Coliforms and *E. coli*

#### Overview

The Colitag P/A Water Test Kit uses an EPA-approved selective and differential medium to detect total coliforms and *E. coli* in water samples in 16 to 48 hours.

#### Method Summary

A 100 mL water sample is mixed with Colitag™ followed by incubation at  $35^{\circ}\text{C} \pm 0.5^{\circ}$  for 22–48 hours. For reading between 16–22 hours, if sample is not already between  $33\text{--}38^{\circ}\text{C}$ , place sample vessel in a  $44.5^{\circ}\text{C}$  water bath for 7 to 10 minutes. If total coliform bacteria are present, the medium changes color from near colorless to yellow. If any *E. coli* bacteria are present in the sample, a bright blue fluorescence is emitted when the sample is subjected to long wavelength (365-nanometer) ultraviolet (UV) light placed 3–4 centimeters away.

Only Colitag offers the longest testing window of 16 to 48 hours. Only Colitag offers you the most versatile total coliform and *E. coli* test in the world.

#### Test Procedure

##### *For sample reading between 16–22 hours*

1. Aseptically add the Colitag to a 100 mL test water sample in a sterile vessel.
2. Secure vessel top and agitate to begin dissolution.
3. If sample is not already at  $33\text{--}38^{\circ}\text{C}$ , then place vessel in a  $44.5^{\circ}\text{C}$  water bath for 7 to 10 minutes.
4. Incubate sample at  $35^{\circ}\text{C} \pm 0.5^{\circ}$  for the remainder of the desired incubation time, 16–22 hours.
5. Read results. (See Interpretation of Results section)

##### *For sample reading between 22–48 hours*

1. Aseptically add the Colitag to a 100 mL test water sample in a sterile vessel.
2. Secure vessel top and agitate to begin dissolution.
3. Incubate sample at  $35^{\circ}\text{C} \pm 0.5^{\circ}$  for 22–48 hours.
4. Read results. (See Interpretation of Results section)

#### Interpretation of Results

1. Visually check each sample for vibrant yellow color. If the test sample is yellow, coliform bacteria are present.
2. If the solution is yellow, examine it for fluorescence using a long wavelength UV lamp. If a bright blue fluorescence is observed, this indicated that MUG-positive *E. coli* bacteria are present.
3. If no yellow color in the sample is observed after the 16–48 hour incubation period, the sample should be recorded as negative for coliform bacteria.

*See package insert for complete instructions*

#### Product Storage

Store at  $2\text{--}30^{\circ}\text{C}$ , away from light.

#### MSDS

The Material Safety Data Sheet for Colitag is available upon request or online at: [www.neogen.com](http://www.neogen.com)

#### Federal Registry Info

Approval notice in the Federal Registry:

Federal Register, Volume 74, No. 216/Tuesday, November 10, 2009/Rules and Regulations

#### Switching to Colitag™ - Proficiency Test Guidance

<http://www.microcheck.com/proficient.html>