

# Instructions for use

## EC Blue 100/100P

**EC Blue is a simple, quick and reliable test method for the qualitative and quantitative determination of coliforms and E.coli in water.**

### Overview

EC Blue is available in 2 formats, in pouches (EC Blue 100P) or in disposable bottles (EC Blue 100). Both contain the exact amount of dry medium required to prepare 100 mL of test solution.

It is simple and easy to use and does not require weighing or autoclaving.

### Instructions

- Pour 100 mL of water tested directly into the EC Blue 100 bottle OR dissolve the EC Blue 100P medium in 100 mL of water to be tested.
- Incubate at  $35 \pm 2$  °C for 24h.
- In presence of coliforms, the reagent turns to blue/blue-green colour.  
*E.coli* releases a fluorescent dye detectable under UV light.

### Comments

Coliform bacteria express  $\beta$ -galactosidase that degrades the X-GAL (colorimetric substrate) in the medium leading to a colour change to blue to blue-green.

When *E.coli* is present, its  $\beta$ -Glucuronidase degrades MUG in the medium into 4-Methyl-Umbelliferone that fluoresces when exposed to UV light (366 nm).

### General information

After use, dispose following local disposal regulations.

### Storage and shelf life

Store at room temperature and avoid light exposure.

Shelf life: 2 years after manufacturing.

Product Name	Packaging	Product Number
EC BLUE 100P	100	05591-EBP-100
EC BLUE 100	80	05593-EB0-080
EC BLUEQUANT	18	06517-EBQ-018
EC BLUE COMPARATOR	1	05617-EBC-001

Comparator DI water Uninoculated Coliform Coliform



Comparator DI water Uninoculated *E.coli* Coliform



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## EC BlueQuant MPN Test

**EC BlueQuant provides a rapid and easy method of quantifying coliforms and E.coli in the form of an MPN test (Most Probable Number).**

### Overview

The EC BlueQuant device allows the user to perform a standardised MPN method without prior serial dilution. Its design allows the test sample to distribute evenly into three ten-fold dilution compartments (10mL, 1mL and 0.1mL) with five replicate compartments per dilution. After incubation at  $35 \pm 2$  °C for 24h, the result can be read off the device and converted to cfu/mL for coliform/E.coli using ISO standard tables (e.g. DIN EN ISO 9308-2:2014-06).

### Instructions

- Mix the water sample (100 mL) with the EC Blue 100/100P medium
- Place the EC BlueQuant on a horizontal surface. Pour the mixture into the EC BlueQuant. Sample distributes evenly in dilution compartments (10, 1 and 0.1 mL); excess of the EC Blue solution is pooled into the upper reservoir.
- Close the lid and incubate the sample for 24 h at  $35 \pm 2$  °C.

### Interpretation

- After incubation, coliforms exhibit a typical blue/blue-green coloration. Samples contaminated with *E.coli* fluoresce under UV light ( 366 nm ).
- Positive wells are determined by comparing their colouration to a colour comparator (P/N 05617-EBC-001)
- For quantitative analysis, count the number of positive wells per compartment (10, 1 and 0.1 mL) and refer to the MPN calibration scale to determine the total number of bacteria in 100 mL.

### General information

After use, dispose following local disposal regulations

### Storage and shelf life

Store at room temperature

Shelf life: N/A

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