EGENKONTROLL.NU



EC Blue

A rapid method for testing the water quality

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Positive samples in natural light
Coliform bacteria produce the ß-galactosidase enzyme, which then cleaves the synthetic substrate X-GAL contained in the ECBlue and simultaneously releases a blue/blue-green dye.

ECBlue – a rapid method for testing the water quality

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



ECBlue 100P

ECBlue is simple to handle – our *»easy to use«* principle:
Add water to be tested into a pre-prepared, sterile, non-fluorescent ECBlue 100 container or dissolve the ECBlue 100P medium in 100 ml of the test water. Then incubate the mixture at 35 ± 2°C. The medium does not require further preparation work.
This means that the test can be carried out anywhere without much effort.



ECBlue 100

ECBlue is quick – our *»fast result«* principle:
Traditional incubating methods require about three days for the detection of coliforms or *E.coli*. ECBlue, on the other hand, already provides reliable test results after 24 hours.

ECBlue is reliable and conclusive – our *»safe and clear«* principle:
Detection is based on a colour reaction and is thus easy to interpret: if coliform bacteria are present, the water turns blue due to the cleavage of the chromogenic substrate X-Gal. In the event of faecal contamination by *E.coli*, these bacteria can only be conclusively detected under UV light (reaction with a fluorescent dye).
Suspended matter, cloudy, yellowish or chlorinated water samples do not generally interfere with detection.

ECBlue is simple to keep – our *»easy to store«* principle:
ECBlue does not need to be cooled and has a shelf life of up to two years at room temperature if protected from light. This saves costs.

The optional tool ECBlueQuant provides a rapid and simple method of quantifying coliforms and *E.coli* in the form of an MPN test (**M**ost **P**robable **N**umber).

ECBlueQuant

1. Size 11 x 9 x 5 cm (LxWxH)
2. MPN method based on ISO-IS. Results can be read off the table in ISO 9308-2
3. Limit of detection: 1 cfu/100 ml for both *E.coli* and coliforms





Coliforms positive



E.coli positive



Positive samples under UV light
About 95% of all *E.coli* strains produce the ß-glucuronidase enzyme. This enzyme hydrolyses the MUG enzyme substrate and thus releases a fluorescent dye that can be detected with UV light.

Overview of the practical advantages

1. **Efficiency:** Simultaneous testing of a medium for coliforms and *E.coli* using a chromogenic enzyme substrate (X-GAL-MUG method).
2. **Speed:** Test result within 24 hours.
3. **Performance:** Bacteria stressed by chlorinated water are also detected with EC Blue in most cases.
4. **Simple and reliable application:** The medium does not need to be sterilised or pre-prepared; readily soluble in water.
5. **Conclusive:** Unambiguous test results by means of a colour reaction; detection limit of coliforms and *E.coli*: 1 cfu / 100 ml. Positive samples can be clearly identified by comparison with the EC BlueComparator (bottle with reference fluid).
6. **Practical packaging:** Plastic bottle (sterilized granule medium in bottle) or blister pack.
7. **Long shelf life:** Up to two years at room temperature in the absence of light.
8. **Cost-saving**

MPN tests – with EC BlueQuant, it has never been so simple

The unique, innovative design of the EC BlueQuant tool allows rapid and reliable processing of MPN tests – simple to operate and without any additional equipment. Like EC Blue 100 and 100 P, all you need is an incubator.
The method is based on the standardised MPN method that uses at least three different dilutions (10, 1, 0.1ml) and 5 compartments per dilution. Testing with the EC BlueQuant does not require a series of dilutions – this saves time compared to traditional MPN methods.

Application

1. Mix the water sample (100 ml) with the EC Blue 100/100 P medium
2. Pour the mixture into the EC BlueQuant. The sample automatically distributes itself evenly between the dilution compartments (please make sure it is placed on a horizontal surface)
3. Check that all dilution compartments are full.
   Close the lid and incubate the sample for 24 h at 35 ± 2°C.
4. At the end of the incubation time, samples contaminated with *E.coli* will fluoresce under UV light (366 nm). Coliforms exhibit a typical blue coloration.



Fluorescence Lamp:
for *E-coli* Fluorescence-Test

Product overview

	ID-Number	Packaging	Use for	Storage
EC Blue 100P	1 000 227	100 ml x 100 pouches (foulded dose form)	Qualitative test	At room temperature Light shielding One year after manufacturing
EC Blue 100	1 000 230	100 ml x 80 bottles (bottle type)	Qualitative test	At room temperature Light shielding One year after manufacturing
Mini Fluorescent Lamp	1 001 017	1 unit	Fluorescence detection of *E.coli*	
EC BlueQuant for MPN (sterilized)	1 001 020	(Main frame and lid) x 18 units	Quantitative test	At room temperature
EC Blue Comparator for EC Blue 100	1 001 018	1 unit	Positive control	Light shielding at 2 – 4°C Two years after manufacturing

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