

## Technical Data Sheet

# Portable Membrane Filtration Kit

Quantifies *E.coli* per 100 mL in water samples following DIN EN ISO 9308-1 and many more fecal indicator bacteria if requested.



# Description

Quantify *E.coli* and other faecal bacteria in water samples closely following DIN EN ISO 9308-1, in remote places. The portable kit is perfectly suited to the requirements of a water testing laboratory under limited conditions: (i) robust, (ii) non-electrical, (iii) easy to transport, (iv) easy to use, (v) independent of inappropriate consumables, (vi) less prone to human error.



Figure 1 – The Portable Membrane Filtration Kit is part of the complete portable water microbiology laboratory by LETZTEST

## Specifications

- Art. no.: 115433 (English); 118193 (French); 1155 (Arabic); 118297 (Spanish)
- Form: Hard-shell case
- Dimension: 450 x 360 x 175 mm
- Weight: 8,6 kg
- Together with the [electricity-free incubator](#) and [water sampler](#) this kit becomes a complete portable microbiological water laboratory.

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- Waterproof: Yes.
- Sample type: drinking water. Suitable for chlorinated and non-chlorinated water samples.
- Quantifies: Escherichia coli in water.
- Detection limit: 1 cfu / 100 ml
- Suggested culture medium with the Kit: Our Compact Dry dehydrated culture plates.
- Advantage: The same kit can be used to quantify other relevant bacteria in water such as *E.coli* and other coliform bacteria, enterococcus, pseudomonas aeruginosa, heterotrophic bacteria, total count bacteria and many more.
- Storage of dehydrated culture plates: storage at 0 - 30 °C, for 2 years.
- Incubation: 24 h at 37 °C
- Waste disposal: Used chromogenic plates should be autoclaved before disposal in a suitable circuit otherwise incinerated.

#### Content of kit

- QR codes in the kit leading to a LETZTEST training video
- QR code leading to direct technical support for end users via WhatsApp by LETZTEST
- Easy understandable, illustrated instruction manual - waterproof and (re)writable; 1pc
- Membrane filtration unit - stainless steel; 1pc
- Portable laboratory table - stainless steel; 1pc
- Manual vacuum pump; 1pc
- 250 ml spray bottle (for sterile water); 1pc
- 100 ml bottle (for ethanol>70%); 1pc
- Multi-purpose bottle - stainless steel (e.g. for more volume after filtration); 1pc
- Laboratory alcohol candle - stainless steel; 1pc
- Container for sterile water - stainless steel; 1pc
- Ethanol container - stainless steel; 1pc
- 1 ml spoon - stainless steel; 1pc
- Flat headed tweezers - stainless steel; 1pc
- Waterproof pen; 1pc
- Membrane filters; 100 pcs
- Dehydrated culture plates Compact Dry (E.coli); 32 pcs
- Thio Bags (100ml) pre-sterilised and with a thiosulphate tablet; 25pcs
- Spare parts. Given the robustness of all components it is unlikely that parts break. But in case this does happen, you don't have to wait for spare parts.
  - Spare valves for manual vacuum pump; 2 pcs.
  - EPDM seal ring for membrane filtration unit; 1 pc

## Consumables

Reorder consumables via [info@letz-test.com](mailto:info@letz-test.com). Please note that you can purchase all consumables independently from LETZTEST. However, LETZTEST offers you the best possible price and guarantees a very fast and economical delivery.

- Dehydrated culture plates Compact Dry
  - Shelf life: 2 years, 1 - 30°C without cooling
  - NordVal International certified, AOAC certified
- Thio Bags (100ml) pre-sterilised and with a thiosulphate tablet
  - Shelf life: No expiration date, no cooling required!
  - Complies with EPA and APHA requirements
- Membrane filters
  - Shelf life: 4 years, no cooling required
  - For bacteriological analysis of water by the ISO 9308-1 membrane filtration method

## Production

100% made in Germany. Originating from [Letzner Pharmawasseraufbereitung GmbH](#) (now EnviroFALK PharmaWaterSystems), LETZTEST is a company that places great importance on the quality of its equipment. Intermediate production steps and finished products are checked against specified release criteria.



HIGH QUALITY

MADE IN GERMANY

## Participants in the development of the product

The improved conceptual design of this LETZTEST kit is the result of collaboration with the [Laboratoire d'Analyse et de Contrôle de la Qualité de l'Eau \(LACQUE\) from Côte d'Ivoire](#). Together, we are pursuing the goal of making water quality monitoring an easy experience for drinking water stakeholders in remote places around the world.

## Additional Support

The **waterproof and (re)writable illustrated instruction manual** helps you to carry out water analysis from A to Z in a simple way and in accordance with international standards. It helps you to ensure the validity of your results.

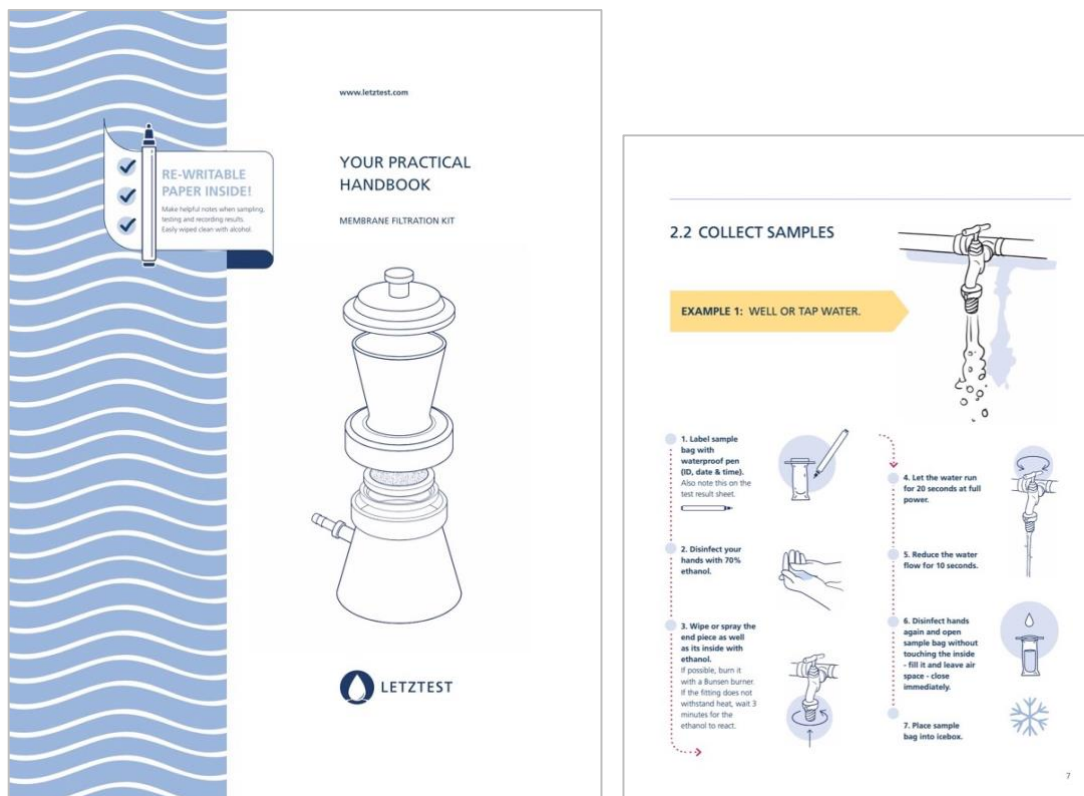


Figure 2 - The illustrated instruction manual - waterproof and (re)writable

Each kit contains a **QR code** that leads to a [practical training video](#). In case of further questions, the end user can also directly and easily contact a LETZTEST technician via a second QR code.



Figure 3 – A QR code in each kit leads you to a training video

The **BactLAB App** allows you to read the results of your tests in one second using the camera of your smartphone, for free!



Figure 4 - The BactLAB App allows you to read your result in one second

## Photos

