

## Technical Data Sheet

# Portable Membrane Filtration Kit



# Description

Quantify *E.coli* & other coliform bacteria in water samples following DIN EN ISO 9308-1, in the laboratory and in the field. LETZTEST has developed a portable membrane filtration kit that is perfectly adapted to the requirements of a water testing laboratory in limited infrastructure conditions: (i) robust, (ii) electricity-free, (iii) high in quality, (iv) easy to transport, (v) easy to use, (vi) independent of inappropriate consumables, (vii) not prone to human errors

## Specifications

- Art. no.: 115433 (English); 118193 (French); 118297 (Spanish)
- Form: Hard-shell case
- Dimension: 420 x 325 x 175 mm
- Weight: 6,8 kg
- Waterproof: Yes
- Sample type: Drinking water. Suitable for chlorinated and non-chlorinated water samples.
- Quantifies: *Escherichia coli* and other coliform bacteria in water according to ISO 9308-1: 2014 standard. Advantage: The same kit can be used to quantify other relevant bacteria in water such as enterococcus, pseudomonas aeruginosa, heterotrophic bacteria, total count bacteria and many more.
- Detection limit: 1 cfu / 100 ml
- Incubation: 24 h at 37 °C
- Waste Disposal: Used chromogenic plates need to be autoclaved prior disposal or incinerated.
- Storage & shelf-life: Compact DRY Plates: storage at 0 – 30 °C, shelf life of two years
- Languages: English, French, Spanish

## Content

- Membrane filtration apparatus – stainless steel; 1pcs
- LETZTEST re-writable practical handbook – waterproof; 1pcs
- Hand vacuum pump; 1pcs
- Spray bottle (sterile water); 1pcs
- Multiusage bottle – stainless steel (to store ethanol or sterile water); 1pcs
- Alcohol candle – stainless steel; 1pcs
- Sterile water cup – stainless steel; 1pcs

- Ethanol cup – stainless steel; 1pcs
- Lockable forceps – stainless steel; 1pcs
- 1ml Measuring spoon – stainless steel; 1pcs
- Flat headed tweezers – stainless steel; 1pcs
- Waterproof pen; 1pcs
- Membrane filters; 100pcs
- Compact DRY Plates (*E coli* & other coliforms); 32pcs
- Pre-sterilized Thio-sample bags; 25pcs

## Production site

### LETZTEST

Gottfried-Hagen-Str. 60-62  
51105 Cologne (Germany)

LETZTEST is a company that attaches great importance to the quality of its products. Both the intermediate production stages and the final products are checked according to specified release criteria.

## Photos



## Testing Procedure



Activate multiple dehydrated growth media plates very quickly, with a flame sterilized stainless steel 1 ml spoon invented by the tenderer.



Sterilize only two critical parts of the Membrane Filtration Apparatus in the ethanol flame using self-lockable forceps



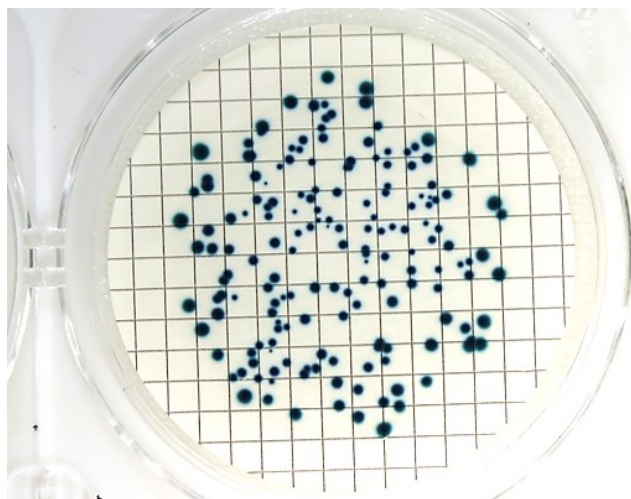
Assemble parts and center a membrane filter using flame sterilized, flat-headed tweezers



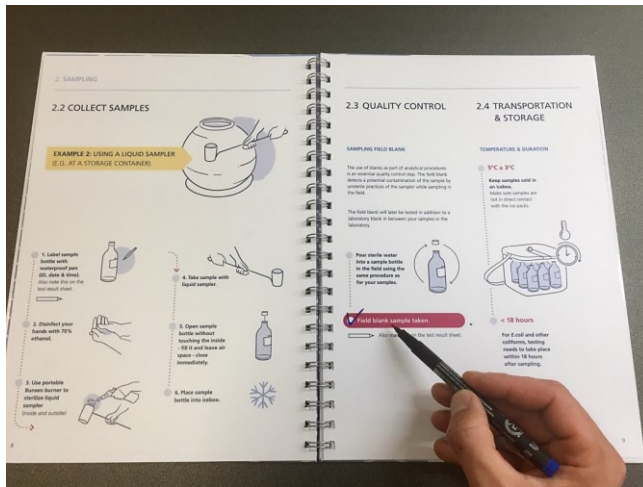
Pour sample into the funnel up to the 100 mL mark and suck the sample through the membrane filter



Remove funnel and place membrane filter into the corresponding media plate using flame sterilized, flat-headed tweezers



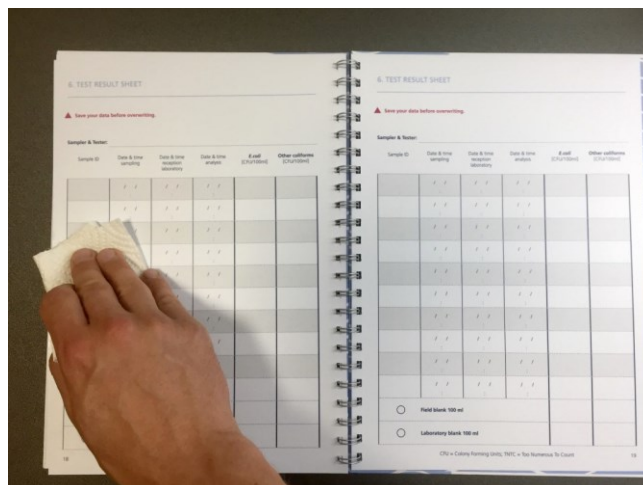
Incubate for 24 h at 37°C in the LETZTEST incubator and count colonies. Number of blue colonies = Number of *E.coli* in 100 mL water sample



## Re-writable practical handbook

Especially useful for use in remote settings by staff with basic water testing skills. Ensuring proper handling, data management and correct results.

Employees with little previous experience can work their way step by step through the practical manual and thus ensure correct results.



The written records in the practical handbook can be photographed or copied and then wiped with ethanol.