

## Laboratory Membrane Filtration Kit

This advanced microbiological water testing kit is tailored for high-volume sample processing, enabling precise quantification of *E. coli* and other fecal indicator bacteria. Compliant with DIN EN ISO 9308-1 standards, it is perfect for both central and remote laboratories. The portable design operates without electricity, ensuring low running costs and making it ideal for large sample volumes and remote projects.

### Key features include:

- No need for electricity or batteries
- Extremely low running costs (~€0.50/sample) with reusable solutions
- Easy to transport (by motorbike) for remote laboratories
- Simple to use with automatic colony counting via a smartphone app
- Insensitive to errors and requires few consumables
- Easy-to-store consumables (no cooling needed)
- Simplified, methanol-free sterilization process
- Capable of testing a larger number of samples compared to similar kits



This kit is ideal for large sample volumes and remote projects, offering a reliable and efficient solution for microbiological water testing.

### Specifications

- Form: Hard-shell case
- Dimensions: 450 x 360 x 175 mm
- Weight: 8.6 kg
- Complete Kit: Includes an electricity-free incubator and water sampler, making it a portable microbiological water laboratory.
- Waterproof: Yes
- Sample Type: Drinking water (suitable for both chlorinated and non-chlorinated samples)
- Quantifies: *Escherichia coli* in water
- Detection Limit: 1 cfu / 100 ml
- Suggested Culture Medium: Compact Dry dehydrated culture plates
- Advantage: Can also quantify other bacteria such as *E. coli*, coliform bacteria, enterococcus, *Pseudomonas aeruginosa*, heterotrophic bacteria, total count bacteria, and more.
- Storage of Culture Plates: 0 - 30 °C, for up to 2 years
- Incubation: 24 hours at 37 °C
- Waste Disposal: Used chromogenic plates should be autoclaved before disposal or incinerated.

## Content of Kit

- Instruction Manual: Easy to understand, illustrated, waterproof, and (re)writable (1 pc)
- Stainless Steel Components:
- Membrane filtration unit (1 pc)
- Portable laboratory table (1 pc)
- Multi-purpose bottle (e.g., for more volume after filtration) (1 pc)
- Laboratory alcohol candle (1 pc)
- Container for sterile water (1 pc)
- Ethanol container (1 pc)
- 1 ml spoon (1 pc)
- Flat-headed tweezers (1 pc)

## Other Items:

- Manual vacuum pump (1 pc)
- 250 ml spray bottle (for sterile water) (1 pc)
- 100 ml bottle (for ethanol >70%) (1 pc)
- Waterproof pen (1 pc)
- Membrane filters (100 pcs)
- Dehydrated culture plates Compact Dry (E. coli) (32 pcs)
- Thio Bags (100 ml) pre-sterilized with a thiosulfate tablet (25 pcs)
- Spare Parts:
- Spare valves for manual vacuum pump (2 pcs)
- EPDM seal ring for membrane filtration unit (1 pc)

## Consumables

- Dehydrated Culture Plates (Compact Dry):
  - Shelf Life: 2 years, 1 - 30°C without cooling
  - Certifications: NordVal International, AOAC
- Thio Bags (100 ml):
  - Shelf Life: No expiration date, no cooling required
  - Compliance: Meets EPA and APHA requirements
- Membrane Filters:
  - Shelf Life: 4 years, no cooling required
  - Usage: Suitable for bacteriological analysis of water by the ISO 9308-1