



User manual

LMC (Product No. 2.04713.700)

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1. Information

Lactose nutrient medium according to DEV¹ for the detection of *E.coli* and coliform bacteria in water samples as well as suitable for swab-analysis.

LMC (Lactose-multi-concentrated) (pH 7.2 ± 0.2) is a ready to use selective lactose broth for a fast and safe qualitative detection of water-specific faecal indicator microorganisms e.g. *E.coli* and coliform bacteria in drinking, mineral, and table water, as well as suitable for swab-analysis within the beverage filling plant.

2. Handling

Required Material

Microbiological workbench

Incubator

Sterile swabs and ready to use sterile swab tubes with screw cap (if necessary)

Application

Be aware to work under sterile conditions in order to prevent secondary contaminations.

For water analysis:

Add 250 mL of your test sample to the bottle containing 50 mL of the LMC-Broth.

In case of analyzing carbonated water, make sure to degas your sample by shaking or neutralisation with NaOH. Close bottle.

For swab-analysis:

Add 250 mL of degassed and sterile water to the broth inside the bottle and stir gently for a short period until mixed. Now the media is ready to use for the swab-test. Please use medium immediately. Use sterile swabs in sterile test tubes with screw caps.

Be careful not to touch the wadding of the swab or the swab stick directly to avoid contamination. After removing the plastic foil from the swab, only touch the unsterile screw cap. Gently wipe the area to be analysed with the swab and place it immediately back into the swab tube and close it with the screw cap. Fill the tubes subsequently with approx. 70% LMC-broth.

Incubation

Place bottles with the water sample or swab into an incubator at 35-39°C/95-102°F and incubate 48 h under aerobic conditions.

Evaluation

If there is a change in colour from violet to yellow, turbidity or gas formation in the sample during incubation, the result is positive. A more definite identification is possible by other appropriate tests e.g. by addition to Endo-agar or similar culture media and subsequent microbiological laboratory analysis (e.g. "colour sequence test", PCR).

¹ DEV-Deutsches Einheitsverfahren. Refers to German Standard Operation Procedures for water analysis.



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3. Storage and Packaging Information

Packaging and Content

unit Cardboard Box (9x50 mL in glass bottles)
 unit size (Box) approx. 22 cm x 22 cm x 18 cm / 8.7 in x 8.7 in x 7.1 in
 unit gross weight (Box) approx. 2.3 kg/ 5 lbs.

Storage

Store at 4-8°C/40-46°F according to product specification.
 Store under dry and dark conditions. Do not freeze product.

Waste Disposal

No dangerous good.
 No hazardous material.
 Please consider your local waste regulations.
 Not inoculated concentrate can be disposed of with normal laboratory waste.
 Inoculated and incubated samples are to be sterilized before disposal at a temperature of 121°C/250°F for 20 min.

Warnings

Don't cook or freeze the product.

4. Related Products

Investigation material	Relevant target microorganisms	Product	Format	Description	Packaging	pH (±0.2)	Incubation T [°C]	Item no.
Water Drinking water Spring water Table and mineral water Well water Rinse water	Total viable count (TVC)	Nutrient Agar in accordance with DEV	Agar	Complex agar Application: Basic culture medium for membrane filtration, pour plate and spread plate method	9 x 250 mL (glass bottle)	7.2	20 or 37	2.04726.782
	Water-specific faecal indicator microorganisms <i>E. Coli</i> & <i>coliform bacteria</i>	LMC	Concentrated broth	Selective bouillon as qualitative pre-test	9 x 50 mL (glass bottle)		37	2.04713.700