TM 1617 – DEV LACTOSE PEPTONE BROTH

INTENDED USE
For enrichment and determination of titre coliforms in water samples.

PRODUCT SUMMARY AND EXPLANATION
Lactose Peptone Broth DEV is used for the enrichment and determining the titre of coliform bacteria in the bacteriological analysis of water according to the German Standard Methods for the examination of water and the German drinking water regulations.
All coliforms ferment lactose with acid and gas production. This group includes the genera *Escherichia, Enterobacter*, *Citrobacter*, and *Klebsiella*. When lactose is fermented it produces acid that changes the color of the medium from blue-purple (alkaline) to yellow (acid).

COMPOSITION

Ingredients	Gms / Ltr
Soy peptone	3.000
Meat peptone	17.000
Sodium chloride	5.000
Lactose	10.000
Bromocresol purple	0.020

PRINCIPLE
The medium consists of Meat peptone and soy peptone which provide nitrogen, vitamins, minerals and amino acids essential for growth. Lactose is the fermentable carbohydrate providing carbon and energy. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Bromocresol purple is the pH indicator.

INSTRUCTION FOR USE
- Dissolve 35.02 grams in 1000 ml purified/distilled water.
- Mix well and dissolve by heating with frequent agitation and Boil for one minute until complete dissolution.
- Dispense into tubes with Durham gas collecting tubes for gas detection and sterilize in autoclave at 15psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Purple coloured clear solution.
pH (at 25°C) : 7.2 ± 0.2

INTERPRETATION
Cultural characteristics observed after incubation.

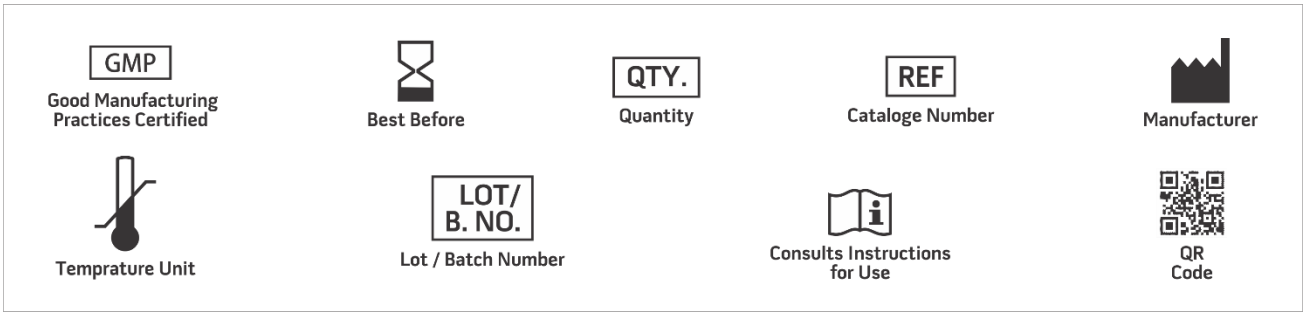
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid	Gas	Incubation Temperature	Incubation Period
Klebsiella pneumoniae	13883	50-100	Good	Positive reaction, yellow colour	Positive reaction	35 °C	40 - 44 Hours
Escherichia coli	25922	50-100	Good	Positive reaction, yellow colour	Positive reaction	35 °C	40 - 44 Hours
Salmonella Typhimurium	14028	50-100	Good	Positive reaction, blue colour	Negative reaction	35 °C	40 - 44 Hours
Enterococcus faecalis	29212	50-100	Good	Positive reaction, greenish colour	Positive reaction	35 °C	40 - 44 Hours
Aeromonas hydrophila	7966	50-100	Good	Positive reaction, blue colour	Negative reaction	35 °C	40 - 44 Hours

PACKAGING:
In pack size of 500 gm bottles.

STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL
After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES
1. Deutsche Einheitsverfahren zur Wasser-, Abwasser- und Schlammuntersuchung. - VCH Verlagsgesellschaft, D-6940 Weinheim.
2. Verordnung über Trinkwasser und über Wasser für Lebensmittelbetriebe vom 12. Dezember 1990. - Bundesgesetzbl., Teil I; 2613-2629 (1990).



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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