

CM 2055 – DEV LACTOSE PEPTONE BROTH

INTENDED USE

For enrichment and determination of titre coliforms in water samples.

PRODUCT SUMMARY AND EXPLANATION

DEV Lactose Peptone Broth is used for enrichment and titre determination of coliform bacteria.

COMPOSITION

| Ingredients | Gms / Ltr |
|---------------------|-----------|
| Meat peptone | 10.000 |
| Lactose | 10.000 |
| Sodium chloride | 5.000 |
| Bromo cresol purple | 0.010 |

PRINCIPLE

The medium consists of Meat peptone which provides carbon and other essential nutrients for growth. Sodium chloride is for the osmotic balance Lactose is the carbohydrate source. Bromocresol purple is a pH indicator which has a yellow colour below pH 5.3 and purple colour above pH 6.7. Due to the fermentation of lactose and the subsequent acid production the colour changes to yellow.

INSTRUCTION FOR USE

Dissolve 25.01grams in 1000 ml purified/distilled water.
Heat if necessary to dissolve the medium completely.
Sterilize by autoclaving at 15psi pressure (121°C) for 15 minutes. Cool to 45-50°C.

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) : 7.0 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Incubation Temperature | Incubation Period |
|----------------------|-------|-------------------|--------|------------------------|-------------------|
| Klebsiella aerogenes | 13048 | 50-100 | Good | 37 °C | 18-24 Hours |



| | | | | | |
|-----------------------|-------|--------|------|-------|-------------|
| Escherichia coli | 25922 | 50-100 | Good | 37 °C | 18-24 Hours |
| Klebsiella pneumoniae | 13883 | 50-100 | Good | 37 °C | 18-24 Hours |

PACKAGING:

Inpacksizeof500 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. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. MacFaddin J.F., 1985, Media for Isolation - Cultivation - Identification - Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.

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|  GMP Good Manufacturing Practices Certified |  Best Before |  QTY. Quantity |  REF Catalogue Number |  Manufacturer |
|  Temperature Unit |  LOT/ B. NO. Lot / Batch Number |  Consults Instructions for Use |  QR Code | |

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

*For LabUse Only

