

## LACTOSE BROTH

Ready to use tubes

### INTENDED USE

Ready to use tubes for the presumptive determination of coliforms in water and sewage

### TYPICAL FORMULA (g/l)

|                 |   |
|-----------------|---|
| Beef Extract    | 3 |
| Gelatin Peptone | 5 |
| Lactose         | 5 |

Final pH 6.8 +/- 0.2

### DESCRIPTION

Lactose Broth is an inhibitor-free liquid medium used as a preliminary test for coliform bacteria. It is recommended by APHA for examination of water and foodstuffs and by USP and EP for the examination of pharmaceutical products and raw materials. It is also recommended by FDA for the non-selective enrichment of *Salmonella*.

The medium contains lactose, meat extract and peptones in quantities that allow an optimal growth of non-fastidious microorganisms such as the coliforms.

### TECHNIQUE

For the presumptive determination of coliforms in water the following procedure is suggested.

Inoculate the tube with 1ml sample. Incubate the fermentation tubes at 5°C and take the first reading by shaking the tube slightly after 24 hours. If gas production is not evident in the Durham tubes, reincubate for 24 hours.

Gas formation within 48 hours is a positive indication of coliforms. The limit of 48 hours excludes the possibility of growing coliforms that ferment lactose slowly. These are of little sanitary interest and do not effect the validity of the method.

To confirm the presumptive test, subculture the positive Lactose Broth tubes into tubes of Brilliant Green Bile Broth 2%

### STORAGE

Store at 2-8° away from direct light - When stored as directed the tubed media remain stable until the expiry date shown on the label. Do not use beyond stated expiry date. Media should not be used if there are any signs of deterioration, discoloration or contamination.

### PRECAUTIONS

For *in vitro* diagnostic use only. Observe approved biohazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilize all biohazard waste before disposal.

### REFERENCES

- APHA (1992) – Compendium of Methods for Microbiological Examination of Foods, 3<sup>rd</sup> Ed.
- APHA (1998) - Standard Methods for the Examination of Water and Wastewater, 20th Ed.
- European Pharmacopoeia, 3<sup>rd</sup> ed. 2001 Supplement
- FDA (1995) Bacteriological Analytical Manual, 8<sup>th</sup> ed. Revision A, 1998. Published by AOAC International.
- U.S. Pharmacopoeia 24, NF 19 (2000)

### PACKAGING

551575

Lactose Broth,

20 x 10 ml ready to use fermentation tubes