TM 1859 – ANDRADE 0.5% LACTOSE PEPTONE WATER

INTENDED USE
For determination of coliform bacteria particularly *Enterobacteriaceae* on the basis of their ability to ferment lactose.

PRODUCT SUMMARY AND EXPLANATION
Andrade 0.5% lactose peptone water can be used to determine coliforms, particularly *Enterobacteriaceae* in water and food on the basis of their ability to ferment lactose. Lactose fermentation reaction produces acids which help in differentiation and identification of various bacteria. On metabolism of lactose in the medium, pH of the medium gets lowered due to formation of acid. This causes subsequent colour change of the indicator, from colourless to pink to red. If the carbohydrate is not metabolized, the colour of the medium remains unchanged.

COMPOSITION

Ingredients	Gms / Ltr
Peptone special	10.000
Lactose	5.000
Acid fuchsin	0.010

PRINCIPLE
Peptone, Special serves as a source of nitrogen, amino acids, vitamins, and other essential growth requirements. Lactose is a fermentable carbohydrate while acidic fuchsin acts as a pH indicator.

INSTRUCTION FOR USE
- Dissolve 15.01 grams of medium in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense in test tubes containing inverted Durham's tubes.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Light yellow to pink Homogeneous Free flowing powder.
Appearance of prepared medium : Pinkish orange 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
Escherichia coli	25922	50-100	Luxuriant	Positive reaction, pink colour	Positive reaction	35-37°C	18-24 Hours
Salmonella Enteritidis	13076	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	35-37°C	18-24 Hours

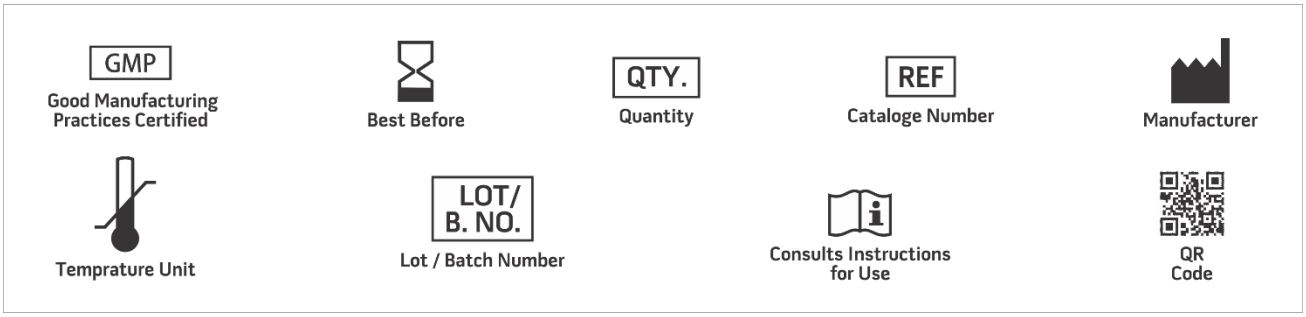
Shigella flexneri	12022	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	35-37°C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Luxuriant	Positive reaction, pink colour	Positive reaction	35-37°C	18-24 Hours
Proteus mirabilis	25933	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	35-37°C	18-24 Hours

PACKAGING:
In pack size of 100 gm and 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.Macfaddin J.F., 1985, Media for isolation-cultivation-identification- maintenance of Medical bacteria , Vol-I, Williams and Wilkins, Baltimore.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
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