

## Product Data Sheet

### **B.T.B. LACTOSE AGAR**

**Product No.** GB-DCM-00059-1A

### **INTENDED USE**

For isolation of pathogenic Staphylococci.

### **Product Description**

Staphylococcus are known to be pathogenic to man and other mammals. Although this organism is frequently a part of the normal human microflora, it can cause significant opportunistic infections under appropriate conditions. Traditionally Staphylococci are divided into two groups on the basis of their ability to clot blood plasma (the coagulase reaction). The coagulase-positive Staphylococci constitute the most pathogenic species, Staphylococcus aureus. BTB Lactose Agar designed by Chapman et al, is used in the detection and isolation of pathogenic Staphylococci. On this media Staphylococci are differentiated by their ability to grow at a high pH and in the presence of bromothymol blue. Plates should be inoculated preferably by spread plate technique and incubated for about 36 hours at 35°C. Typical colonies appear deep yellow (90% approx.) or blue grey (10% approx.). Coliforms may grow but are differentiated by their appearance.

### **Product Specifications**

<b>Ingredients</b>	<b>Gms / Ltr</b>
Proteose peptone	5.000
Beef extract	3.000
Lactose	10.000
Bromo thymol blue	0.170
Agar	15.000

### **PRINCIPLE**

Proteose peptone and beef extract serves as a source of carbon, nitrogen, long chain amino acids, vitamins and other essential nutrients. Lactose is the fermentable carbohydrate with bromothymol blue as an indicator.

### **QUALITY CONTROL SPECIFICATIONS**

Appearance of Powder:	Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium:	Greenish blue coloured, clear to slightly opalescent gel forms in Petri plates.
PH (at 25°C):	8.6±0.2

Microorganism	ATCC	Inoculum (CFU)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Good-Luxuriant	>=50%	yellow	45°C	18-24 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Good-Luxuriant	>=50%	Golden yellow	45°C	18-24 Hours
Salmonella Typhi	6539	50-100	Good-Luxuriant	>=50%	Blue/colourless	45°C	18-24 Hours
Staphylococcus aureus subsp. aureus	6538	50-100	Good-Luxuriant	>=50%	Golden yellow	45°C	18-24 Hours
Staphylococcus epidermidis	12228	50-100	Good-Luxuriant	>=50%	Blue/colourless	45°C	18-24 Hours

### 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.

### Precautions and Disclaimer

- Dissolve 33.17 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

**This product is for research use only.**