

## Product Data Sheet

### LITMUS LACTOSE AGAR

**Product No.** GB-DCM-00342-1A

### INTENDED USE

For differentiation of Lactose fermenting and Lactose non-fermenting microorganisms.

### PRODUCT SUMMARY

Numerous plating media are in use today for the differentiation of lactose-fermenters and lactose non-fermenters. Some of these are selective, whereas others are differential. Some lactose fermenting, gram-negative enteric bacteria can tolerate the inhibitory substances present in the media. These bacteria can be recognized readily by their appearance on selective plates. Litmus Lactose Agar is formulated by Wurtz for the differentiation of lactose fermenting and lactose nonfermenting bacteria.

### Product Specifications

Ingredients	Gms / Ltr
Meat Peptone	5.000
Beef extract	3.000
Lactose	10.000
Litmus	1.000
Agar	10.000

### PRINCIPLE

This medium consists of Meat peptone, beef extract which provide nitrogenous nutrients to the organisms. Lactose is fermented by lactose fermenting bacteria with acid production. Litmus is the pH indicator, which turns red at acidic pH. Colonies of lactose fermenting bacteria are surrounded by a red zone, which distinguishes them from colonies of other organisms that either do not change the surrounding medium or change it to blue due to production of ammonia. Inoculate culture from primary fermentation tubes showing gas either by streaking directly or by pour plate method of serially diluted culture.

### INSTRUCTION FOR USE

- Dissolve 29.0 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.

## QUALITY CONTROL SPECIFICATIONS

Appearance of Powder      Light purple to greyish yellow homogeneous free flowing may contain minute to small particles.

Appearance of prepared :      Dark purple coloured clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) :                      7.0± 0.2

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	>=70%	Red	35-37°C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Luxuriant	>=70%	Red	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	Deep blue-violet	35-37°C	18-24 Hours
Salmonella Typhi	6539	50-100	Luxuriant	>=70%	Deep blue-violet	35-37°C	18-24 Hours
Shigella flexneri	12022	50-100	Luxuriant	>=70%	Deep blue-violet	35-37°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.

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