TM 2099 - GLUCOSE AGAR

INTENDED USE
For differentiation of *Enterobacteriaceae* in urine, water and food samples.

PRODUCT SUMMARY AND EXPLANATION
Glucose agar is used for the differentiation of *Enterobacteriaceae* in urine, water and food. It differentiates species on the basis of glucose fermentation. The *Enterobacteriaceae* are gram- negative chemoautotroph that possess both respiratory and fermentative metabolism.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	2.000
Glucose	10.000
Sodium chloride	5.000
Yeast extract	1.000
Potassium hydrogen phosphate	0.300
Bromothymol blue	0.080
Agar	2.500

PRINCIPLE
Tryptone and Yeast extract provide essential nutrients for growth: nitrogen, vitamins, minerals and amino acids; Glucose is the fermentable carbohydrate providing carbon and energy; Sodium chloride maintains the osmotic balance; Bromothymol blue is a pH indicator.

INSTRUCTION FOR USE
- Dissolve 20.88 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure for 15 minutes and dispense as desired.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Light yellow to light green homogeneous free flowing powder.
Appearance of prepared medium : Blue green coloured, clear to slightly opalescent gel forms in tubes as butts.
pH (at 25°C) : 7.1±0.2

INTERPRETATION
Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid production	Incubation Temperature	Incubation Period
Enterobacter aerogenes	13048	50-100	Good	Positive reaction(colour changes to yellow)	35 - 37°C	18-24 Hours

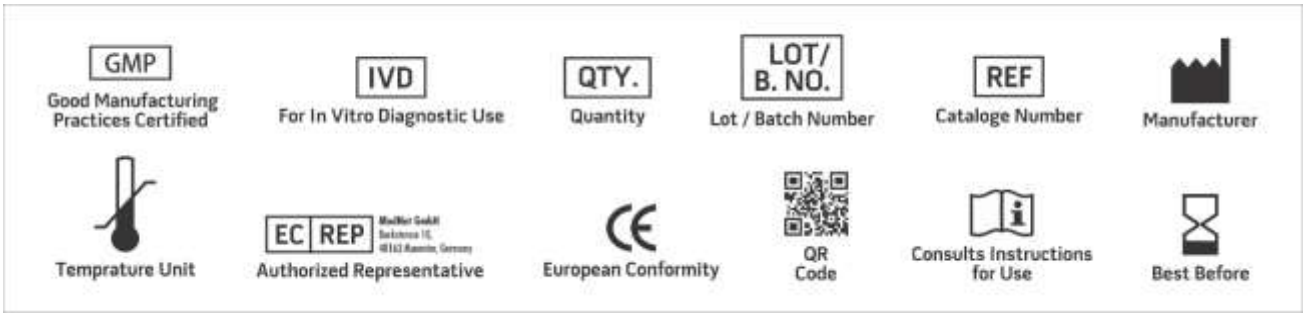
Escherichia coli	25922	50-100	Good	Positive reaction(colour changes to yellow)	35 - 37°C	18-48 Hours
Salmonella Typhimurium	14028	50-100	Good	Positive reaction(colour changes to yellow)	35 - 37°C	18-48 Hours

PACKAGING:
In pack size of 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. Waisbren, Carr and Dunnett, 1951, Am. J. Clin. Path., 21:884.



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

***For Lab Use Only**

Revision: 08 Nov., 2019