TM 2418 – VIOLET RED BILE AGAR W/ GLUCOSE AND LACTOSE

INTENDED USE

For selective isolation and enumeration of coli-aerogenes bacteria in water, milk, other dairy food products and clinical samples.

PRODUCT SUMMARY AND EXPLANATION

Violet Red Bile Agar w/ Glucose and Lactose is a selective medium recommended for detection of Enterobacteriaceae species. Mossel et al added glucose to the medium and observed an improved detection of coliforms. Incubation can be carried out at different temperatures and incubation time depending upon the group of Enterobacteriaceae to be recovered.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissues	7.000
Yeast extract	3.000
Bile salts mixture	1.500
Sodium chloride	5.000
Glucose	10.000
Lactose	10.000
Agar	12.000
Neutral red	0.030
Crystal violet	0.002

PRINCIPLE

Peptic digest of animal tissue and yeast extract provide nitrogenous compounds and other nutrients essential for bacterial metabolism. This media is selective due to presence of the inhibitors; bile salts mixture and crystal violet. Crystal violet inhibits gram-positive organisms especially staphylococci. Neutral red indicator helps to detect lactose and glucose fermentation. Lactose and glucose fermenting strains grow as red or pink coloured colonies and may be surrounded by a zone of acid precipitated bile. Sodium chloride maintains the osmotic equilibrium in the medium The red colour is due to absorption of neutral red and a subsequent colour change of the dye when the pH of medium falls below 6.8.

INSTRUCTION FOR USE

- Dissolve 48.53 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely. Do not autoclave.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow to pink homogeneous free flowing powder.
Appearance of prepared medium : Reddish purple coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 7.4 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period
Enterobacter aerogenes	13048	50-100	Good-Luxuriant	>=50%	Pink-red	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Good-Luxuriant	>=50%	Pink-red with bile precipitate	35-37°C	18-24 Hours
Escherichia coli	8739	50-100	Good-Luxuriant	>=50%	Pink-red with bile precipitate	35-37°C	18-24 Hours
Salmonella Enteritidis	13076	50-100	Good-Luxuriant	>=50%	Light pink	35-37°C	18-24 Hours
Staphylococcus aureus	25923	>=10^3	Inhibited	0%	-	35-37°C	18-24 Hours
Staphylococcus aureus	6538	>=10^3	Inhibited	0%	-	35-37°C	18-24 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

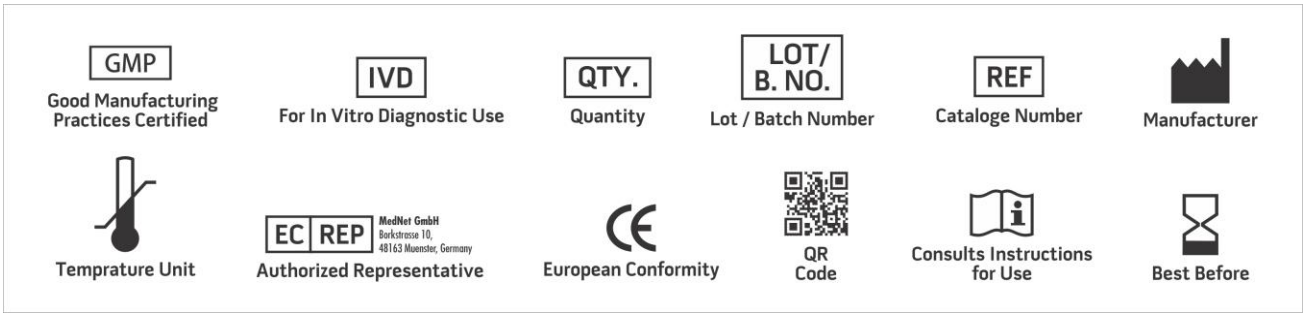
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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. Mossel D.A.A., Mengerink W.H.J. & Scholts H.H., 1962, J. Bacteriol, 84 : 381.
2. Mossel D.A.A. et al, 1978, Lab. practice, 27 No. 12 : 1049
3. Mossel D.A.A. et al, 1979, Food Protect., 42 : 470.
4. Mossel D.A.A. et al, 1986, J. Appl. Bact., 60 : 289.



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

***For Lab Use Only**

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