TM 1927 - VIOLET RED BILE GLUCOSE AGAR

INTENDED USE

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

PRODUCT SUMMARY AND EXPLANATION

Violet Red Bile Glucose Agar is a selective medium recommended for detection and enumeration of *Enterobacteriaceae* especially the bile tolerant gram-negative bacteria from non-sterile products and pharmaceutical preparations. The medium is prepared as described in British Pharmacopoeia and is in accordance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP/IP.

The sample is initially enriched in Enterobacteria Enrichment broth -Mossel and then subcultured on Violet Red Bile Glucose Agar.

COMPOSITION

Ingredients	Gms / Ltr
Yeast extract	3.000
Pancreatic digest of gelatin	7.000
Bile Salts	1.500
Sodium chloride	5.000
Glucose monohydrate	10.000
Neutral red	0.030
Crystal violet	0.002
Agar	15.000

PRINCIPLE

Pancreatic digest of gelatin 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 and crystal violet. Crystal violet inhibits gram- positive organisms especially Staphylococci. Neutral red indicator helps to detect lactose and glucose fermentation. Glucose fermenting strains produce red colonies with pink-red halos in the presence of neutral red. 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 41.60 grams of dehydrated medium in 1000 ml purified /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 pinkish beige 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 an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of Colony	Incubation Temperature	Incubation Period
Escherichia coli	8739	50 -100	Good-luxuriant	>=50 %	Pink-red with bile precipitate	30 -35 °C	18-24 Hours
Pseudomonas aeruginosa	9027	50 -100	Good-luxuriant	>=50 %	Pink to purple	30 -35 °C	18-24 Hours
Escherichia coli	9002	50 -100	Good-luxuriant	>=50 %	Pink-red with bile precipitate	30 -35 °C	18-24 Hours
Escherichia coli	25922	50 -100	Good-luxuriant	>=50 %	Pink-red with bile precipitate	30 -35 °C	18-24 Hours
Salmonella Enteritidis	13076	50 -100	Good-luxuriant	>=50 %	Light pink	30 -35 °C	18-24 Hours
Enterobacter aerogenes	13048	50 -100	Good-luxuriant	>=50 %	Pink-red	30 -35 °C	18-24 Hours
Staphylococcus aureus	25923	>=10^3	Inhibited	0%	-	30 -35 °C	>=24 Hours
Staphylococcus aureus	6538	>=10^3	Inhibited	0%	-	30 -35 °C	>=24 Hours

PACKAGING:
In pack size of 100 gm and 500 gm bottles.

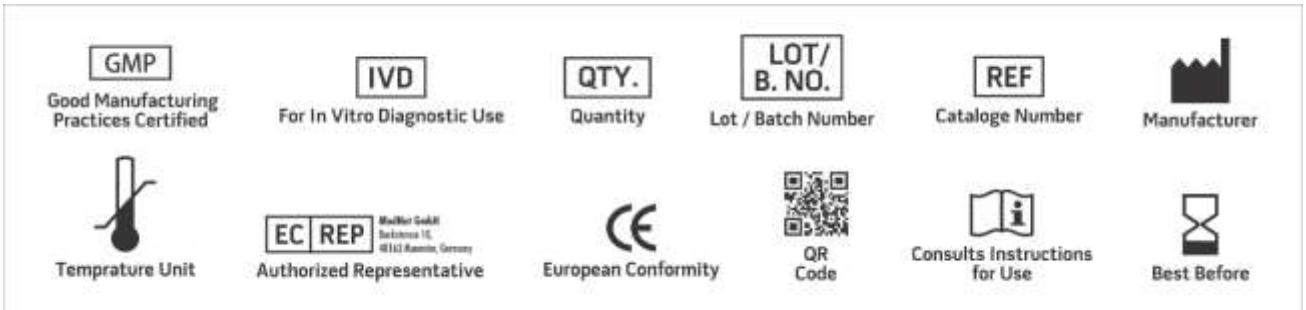
STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label 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. The United States Pharmacopoeia, 2011, The United States Pharmacopoeial Convention. Rockville, MD.
2. British Pharmacopoeia, 2011, The Stationery Office British Pharmacopoeia
3. European Pharmacopoeia, 2011, European Dept. for the quality of Medicines.
4. Japanese Pharmacopoeia, 2008.
5. Indian Pharmacopoeia, 2010, Govt. of India, the controller of Publication, Delhi, India.



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

***For Lab Use Only**

Revision: 08 Nov., 2019