

# TM 1627 - VIOLET RED BILE AGAR W/ GLUCOSE & LACTOSE (as per USP)

#### **INTENDED USE**

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

#### PRODUCT SUMMARY AND EXPLANATION

This medium is a selective medium, recommended for detection and enumeration of gram negative bile-tolerant bacteria in accordance with United States Pharmacopoeia, 2008 from food and dietary supplement preparations.

## **COMPOSITION**

Ingredients	Gms / Ltr
Pancreatic digest of gelatin	7.000
Yeast extract	3.000
Lactose	10.000
Bile salts	1.500
D-Glucose monohydrate	10.000
Sodium chloride	5.000
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 monohydrate fermentation. Lactose and glucose monohydrate fermenting strains grow as red or pink 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 50.62 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**

Growth Promotion is carried out in accordance with USP. Cultural response was observed after an incubation.











Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period
Escherichia coli	8739	50 -100	Good	40-50%	Pink-red with bile precipitate	30-35°C	18-24 Hours
Pseudomonas aeruginosa	9027	50 -100	Good	40-50%	Pink to purple	30-35°C	18-24 Hours
Escherichia coli	25922	50 -100	Good	40-50%	Pink-red	30-35°C	18-24 Hours
Salmonella Enteritidis	13076	50 -100	Good	40-50%	Light pink	30-35°C	18-24 Hours
Enterobacter aerogenes	13048	50 -100	Good	40-50%	Pink-red	30-35°C	18-24 Hours
Staphylococcus aureus	25923	>=10³	Inhibited	0%	-	30-35°C	18-24 Hours
Staphylococcus aureus	6538	>=10³	Inhibited	0%	-	30-35°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. The United States Pharmacopoeia, 2009 Convention. Rockville, MD.















2. Davis J.G., 1951, Milk Testing, dairy Industries Limited, London; pg.131.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. \*For Lab Use Only Revision: 08 Nov., 2019







