

# TM 550 – VIOLET RED BILE GLUCOSE AGAR W/ LACTOSE (as per EP)

#### **INTENDED USE**

For detection and enumeration of Enterobacteriaceae in raw foods.

#### PRODUCT SUMMARY AND EXPLANATION

It is selective medium recommended for detection of all the members of the Enterobacteriaceae as recommended by EP and BP. Mossel et al added glucose to the medium observing 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	
Agar	15.000	
Glucose monohydrate	10.000	
Lactose monohydrate	10.000	
Pancreatic digest of gelatin	7.000	
Sodium chloride	5.000	
Yeast extract	3.000	
Bile salts	1.500	
Neutral red	0.030	
Crystal violet	0.002	

#### **PRINCIPLE**

Pancreatic digest of gelatin and yeast extract provide nutrients to the bacteria while lactose, dextrose and neutral red mixture helps to detect dextrose and lactose fermentation. Bile salts mixture and crystal violet select the growth of Gram negative intestinal bacteria.

### **INSTRUCTION FOR USE**

- Dissolve 50.13 grams in 1000 ml purified/ distilled water.
- Heat to boiling to dissolve the medium completely.
- DO NOT AUTOCLAVE. Mix well and pour into sterile plates.

## **QUALITY CONTROL SPECIFICATIONS**

Appearance of dehydrated medium Pale yellow to pinkish beige homogeneous free flowing powder Appearance of prepared medium Reddish purple coloured clear to slightly opalescent gel forms pH (at 25°C) 7.4±0.2

#### INTERPRETATION

Cultural characteristics observed after incubation.













Microorganism	АТСС	Inoculum (CFU/ml)	Growth	Colony of colony	Incubation Temperature	Incubation Period
Enterobacter aerogenes	13048	50-100	Good-luxuriant	Pink-red	35 - 37°C	18 - 24 hours
Escherichia coli	25922	50-100	Good-luxuriant	Pink-red	35 - 37°C	18 - 24 hours
Salmonella Enteritidis	13076	50-100	Good-luxuriant	Light Pink	35 - 37°C	18 - 24 hours
Staphylococcus aureus	25923	≥1000	Inhibited	-	35 - 37°C	18 - 24 hours

#### **PACKAGING:**

In pack size of 500 gm bottle.

#### **STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 10-25°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 European Pharmacopoeia, 4th Edition 2002, Council of Europe, Strasbourg.
- 2. The British Pharmacopoeia, 4th Edition 2002, Council of Europe, Strasbourg.
- 3. Mossel D.A.A., Mengerink W.H.J. & Scholts H.H., 1962, J. Bacteriol, 84:381.
- 4. Mossel D.A.A. et al, 1978, Lab. practice, 27 No. 12: 1049
- 5. Mossel D.A.A. et al, 1979, Food Protect., 42:470.
- 6. Mossel D.A.A. et al, 1986, J. Appl. Bact., 60: 289.









## **PRODUCT DATA SHEET**

















**Temprature Unit** 











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

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