

TM 483-VIOLET RED BILE GLUCOSE AGAR W/O LACTOSE (ISO 21528-1 & 2:2017)

INTENDED USE

For detection and enumeration of Enterobacteriaceae in raw foods.

PRODUCT SUMMARY AND EXPLANATION

Violet Red Glucose Bile Agar is used for the detection and enumeration of Enterobacteriaceae in food, animal feed and environmental samples. This medium is a modified form of Violet red bile lactose agar, which was formulated by Mossel et al by replacing lactose with glucose to improve the recovery of all Enterobacteriaceae. In this medium, Enterobacteriaceae rapidly ferment glucose and so reduce the pH of the medium, which produces purple/pink coloured colonies due to the inclusion of the neutral red indicator and crystal violet in the medium. The composition & performance criteria of this medium are as per the specifications laid down in ISO 21528.

COMPOSITION

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

PRINCIPLE

The medium contains Peptic digest of animal tissue and yeast extract that serve as sources of carbon, nitrogen, vitamins and other essential growth nutrients. Glucose is the fermentable carbohydrate, utilization of which leads to the production of acids. Neutral red indicator detects the acidity so formed. Crystal violet and bile salts mixture help to inhibit the accompanying gram-positive and unrelated flora. Sodium chloride maintains the osmotic equilibrium. Violet Red Bile Agar is not completely specific for enteric; other accompanying bacteria may give the same reaction. Further biochemical tests are necessary for positive identification.

INSTRUCTION FOR USE

- Dissolve 38.53 grams in 1000ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely. Do Not Autoclave.
- Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder Appearance of Prepared medium

Reddish purple colored, clear to slightly opalescent gel pH (at 25°C) 7.4 ± 0.2





Light yellow to pink, homogeneous free flowing powder









INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Escherichia coli	25922	50 -100	Luxuriant	>=50 %	Pinkish red with bile ppt	35-37°C	18-24 Hours
Escherichia coli	8739	50 -100	Luxuriant	>=50 %	Pinkish red with bile ppt	35-37°C	18-24 Hours
Pseudomonas aeruginosa	9027	50 -100	Luxuriant	>=50 %	Pink to red	35-37°C	18-24 Hours
Salmonella Enteritidis	13076	50 -100	Luxuriant	>=50 %	Light pink	35-37°C	18-24 Hours
#Klebsiella aerogenes	13048	50 -100	Luxuriant	>=50 %	Pink-red	35-37°C	18-24 Hours
Staphylococcus aureus	25923	≥1000	Inhibited	0%	-	35-37°C	18-24 Hours

#Formerly Known as Enterobacter arogenes

PACKAGING

In 500 gm packaging size.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 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 powder show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

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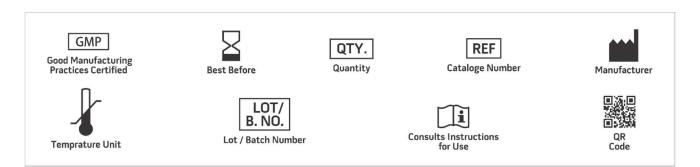








PRODUCT DATA SHEET



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 05th Oct. 2019







