

CM 22110 -VIOLET RED BILE LACTOSE AGAR (ISO 4832:2006)

INTENDED USE

For detection and enumeration of coliform bacteria in food, water and dairy products.

PRODUCT SUMMARY AND EXPLANATION

Violet Red Lactose Bile Agar, a modification of MacConkey's original formulation is used for the enumeration of coliform bacterial group. It relies on the use of the selective inhibitory components crystal violet and bile salts and the indicator system lactose, and neutral red. Thus, the growth of many unwanted organisms is suppressed, while tentative identification of sought bacteria can be made. Organisms, which rapidly attack lactose, produce pinkish red colonies surrounded by purple halos. Non-fermenters produce colourless to orangish yellow. Whereas, late lactose-fermenters produce pink to pale pink colonies. It is recommended by the ISO committee and the composition & performance criteria of this medium are as per the specifications laid down in ISO 4832:2006.

COMPOSITION

Ingredients	Gms / Ltr
Agar	12.000
Lactose	10.000
Peptone	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 serve as sources of carbon, nitrogen, vitamins and other essential growth nutrients. Lactose 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.
- Mix well pour into sterile Petri plates.

Note: Continue to boil for up to 2 minutes with swirling or for the minimum time necessary to dissolve completely.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	:	Light yellow to pink, homogeneous free flowing powder
Appearance of Prepared medium	:	Reddish purple colored, clear to slightly opalescent gel
pH (at 25°C)	:	7.4± 0.2



INTERPRETATION

Cultural characteristics observed after incubation. Recovery rate is considered 100% for bacteria growth on Soya Agar.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Enterobacter aerogenes	13048	50-100	Luxuriant	>=50%	Pink to pinkish red	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	>=50%	Pinkish red with bile ppt. and purple halo	35-37°C	18-24 Hours
Salmonella enteritidis	13076	50-100	Luxuriant	>=50%	Colourless to orangish yellow -	35-37°C	18-24 Hours
Staphylococcus aureus	25923	≥1000	Inhibited	0%		35-37°C	18-24 Hours

PACKAGING

In 100 & 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.







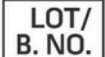


Product Deterioration: Do not use, if powder show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

DISPOSAL

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

REFERENCES

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3. MacConkey A., 1905, J. Hyg., 5, 333-379
4. Corry J. E. L., Curtis G. D. W. and Baird R. M., (Ed.), 1995, Culture Media for Food Microbiology, Vol. 34, Progress in Industrial Microbiology, Elsevier, Amsterdam.
5. Marshall R. T., (Ed.), 1992, Standard Methods for the Examination of Dairy Products, 16th Ed., APHA, Washington, D. C.
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 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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



*For Lab Use Only

